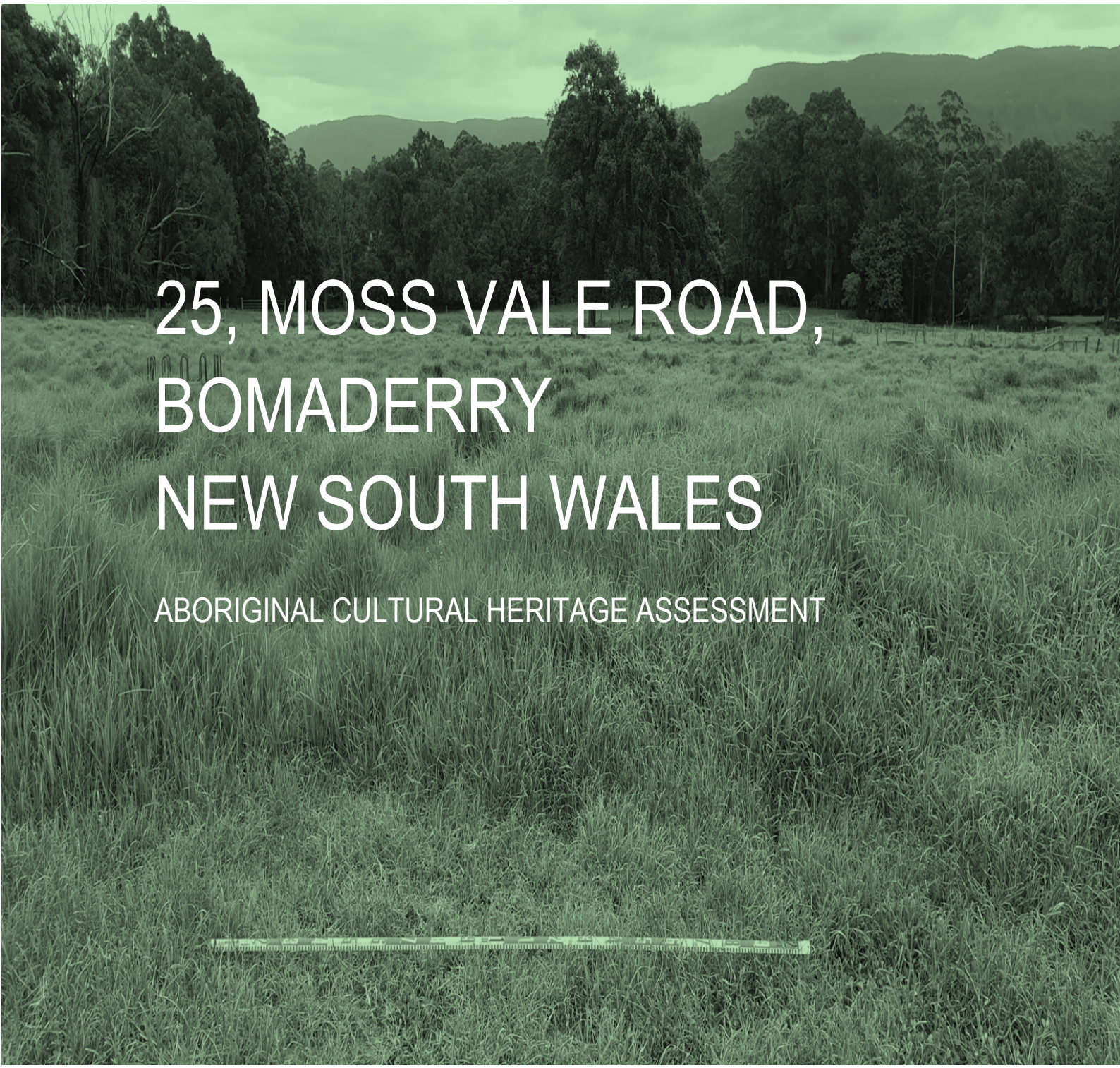
AUSTRAL ARCHAEOLOGY PTY LTD
ABN: 55 629 860 975
Info@australarch.com.au
www.australarchaeology.com.au

AUSTRAL ARCHAEOLOGY



25, MOSS VALE ROAD, BOMADERRY NEW SOUTH WALES

ABORIGINAL CULTURAL HERITAGE ASSESSMENT

FINAL REPORT

ALLEN PRICE AND SCARRATTS

allen price & scarratts pty ltd
land and development consultants

DOCUMENT INFORMATION

Project:	25, Moss Vale Road,
Services required:	Aboriginal Cultural Heritage Assessment
Client:	Allen Price & Scarratts
Prepared by:	Sejal Pandya, Paul Howard, David Marcus, Doug Williams
Project number:	2109

DOCUMENT HISTORY AND APPROVAL STATUS

Version No.	Version Type	Issue Date	Authored by	Approved by	Date Approved
1	Draft	01/04/2021	Sejal Pandya, Paul Howard	David Marcus	1/04/2021
2	Final	07/04/2021	Sejal Pandya	Paul Howard	7/04/2021
3	Final	24/08/2021	Sejal Pandya & Doug William	Doug William	06/09/2021
4	Final	3/12/2021	Sejal Pandya & Doug William	Alex Beben	03/12/2021
5	Final	28/01/2022	Sejal Pandya & Doug William	Alex Beben	28/01/2022

DISTRIBUTION OF COPIES

Version No.	Quantity	Issue date	Issued to
1	1	1/04/2021	Allen Price and Scarratts
2	1	7/04/2021	Allen Price and Scarratts
2	1	10/05/2021	Stakeholders
3	1	10/06/2021	Allen Price and Scarratts
3	1	06/09/2021	Allen Price and Scarratts
4	4	3/12/2021	Allen Price and Scarratts, Stakeholders & Heritage NSW
5	1	28/01/2022	Allen Price and Scarratts, Stakeholders & Heritage NSW

Copyright and Moral Rights

No part of this document may be reproduced or distributed in any form or by any means without prior permission from a representative of Austral Archaeology Pty Ltd. Austral Archaeology Pty Ltd also reserves the right to use documents and materials produced for this project for future presentations or publications, if required.

In the preparation of this report historical sources and other reference materials are acknowledged in text citations and in a separate section at the end of the report. Reasonable effort has been made to acknowledge and obtain permission from the relevant copyright owners.

EXECUTIVE SUMMARY

This report has been prepared for Allen Price and Scarratts Pty Ltd and details the Aboriginal archaeological and cultural heritage assessment of land situated at 25 Moss Vale Road, Bomaderry, New South Wales (NSW) [the study area], within the Shoalhaven Local Government Area (LGA) and the Parish of Cambewarra in the County of Camden.

The study area is defined by the boundary of Lot 1, DP520502, Lot 110, DP131219, and Lot 129, DP3060. The study area is located in the suburb of Bomaderry, 55 kilometres southwest of the Wollongong Central Business District.

This Aboriginal Cultural Heritage Assessment (ACHA) was undertaken to assess the archaeological potential for Aboriginal material as part of a Development Application (DA) under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) before the proposed subdivision of the study area. The ACHA has been undertaken in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010a), the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011a) and the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW 2010b) [Consultation Requirements].

The background research undertaken for the study area revealed 4 sites in close proximity to the study area. Three of the sites were artefact scatters and one was a grinding groove site found near the Bomaderry Creek reserve. These sites are located towards the western and south-western sides of the study area. No sites were previously registered within the study area itself.

During the survey, two different landforms of archaeological sensitivity were identified – a gentle simple slope and a creek terrace. Gentle slopes occupy the central area and were assessed to be of moderate archaeological potential. The creek terrace on the western boundary of the study area close to Bomaderry Creek was assessed as having moderate to high archaeological potential. The two landforms were considered to be moderately disturbed due to past land-use practices.

Test excavation was conducted in these two landforms. A total of 31 pits were excavated covering the two areas. A total of 114 artefacts were recorded from the gentle slope and creek terrace landform from the test pits.

The Aboriginal site identified during this ACHA report is described, along with the significance in the table below:

Site	Associated AHIMS listings	Aboriginal cultural heritage values	Significance
Moss Vale Road Artefact scatter	• Moss vale road artefact scatter 1	Moss Vale Road Artefact Scatter 1 represents an open artefact scatter site. The artefact scatter spans two landforms- gentle slope and creek terrace and contained a total of 114 artefacts with a reasonably even distribution across the study area. Several loci of higher density clusters were recorded towards the base of the gentle slope and outer edge of the creek terrace. Although the site represents a common site type in the region, the potential to contribute to understandings of Aboriginal occupation of the area through analysis of a larger sample of artefacts means that it retains moderate archaeological significance.	Moderate

ABORIGINAL COMMUNITY CONSULTATION

Consultation with Aboriginal stakeholders has been completed in accordance with the Consultation Requirements (DECCW 2010b). A summary of this process is included below.

Stage	Component	Commenced	Completed
Stage 1	Letters to agencies	16/03/2020	N/A
	Registration of stakeholders	19/03/2020	16/04/2020
Stage 2	Project information	17/04/2020	N/A
Stage 3	Review of project methodology	17/04/2020	11/05/2020
Stage 4	Review of ACHA by Aboriginal stakeholders	10/05/2021	7/06/2021
Stage 4	Review of Revised ACHA by Aboriginal stakeholders		

Further information on the consultation completed for the project can be found in Section 3 and Appendix 1 to 5 of this report.

RECOMMENDATIONS

The following recommendations are derived from the findings described in this ACHA. The recommendations have been developed after considering the archaeological context, environmental information, consultation with the local Aboriginal community, and the findings of the test excavation and the predicted impact of the planning proposal on archaeological resources.

It is recommended that:

1. Before any works occur, the proponent is to apply to Heritage NSW for an Aboriginal Heritage Impact Permit (AHIP) to partially harm site Moss Vale Road Artefact Scatter 1 (AHIMS # 52-5-0996), please note the boundaries of this site have expanded to incorporate the registered sites AHIMS # 52-5-0997 and AHIMS # 52-5-0996. This site is protected under Section 90 of the *NSW National Parks and Wildlife Act 1974* (NPW Act). The proponent must not undertake any development work on the site prior to receiving an AHIP.
2. A condition of the AHIP should be the salvage of a larger sample of artefacts from TPs 10, 13, 21, 22, 27 and 28. This salvage should be undertaken according to the salvage method provided in Appendix 6 of this report.
3. Prior to the commencement of any ground works related to the activity, all contractors and/or employees of contractors involved in ground disturbance works must attend a cultural heritage induction prepared and presented by a qualified archaeologist in cooperation with local Aboriginal people.
4. The proponent must prepare an Ad Hoc finds protocol to guide actions subsequent to finding suspected Aboriginal objects or remains. The protocol should be submitted as part of the AHIP application
5. Aboriginal ancestral remains may be found in a variety of landscapes in NSW. If any suspected human remains are discovered during any activity, you must:

- immediately cease all work at that location and not further move or disturb the remains
- notify the NSW Police and Heritage NSW's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location
- not recommence work at that location unless authorised in writing by Heritage SNW.

6. All Aboriginal objects collected during the archaeological testing will be reburied onsite at the nominated location (7).
7. It is recommended that the Proponent continues to inform the Aboriginal stakeholders about the management of Aboriginal cultural heritage within the study area following the completion of the project. The consultation outlined as part of this ACHA is valid for 6 months and must be maintained by the proponent for it to remain continuous. If a gap of more than 6 months occurs, then the consultation will not be suitable to support an AHIP for the project.
8. A copy of this report should be forwarded to all Aboriginal stakeholder groups who have registered an interest in the project.

CONTENTS

EXECUTIVE SUMMARY III

CONTENTS V

1 INTRODUCTION 1

1.1 PURPOSE OF THE ACHA 1

1.2 ASSESSMENT OBJECTIVES 1

1.3 SUMMARY OF LEGISLATIVE PROCESS 2

1.4 PROJECT TEAM AND QUALIFICATIONS 3

1.5 ABBREVIATIONS 5

2 DESCRIPTION OF THE AREA 6

2.1 THE STUDY AREA 6

2.2 ENVIRONMENTAL CONTEXT 11

2.2.1 TOPOGRAPHY AND HYDROLOGY 11

2.2.2 GEOLOGY AND SOILS 15

2.2.3 CLIMATE AND VEGETATION 19

2.2.4 FLORA AND FAUNA 19

3 CONSULTATION PROCESS 20

3.1 INTRODUCTION 20

3.2 STAGE 1: NOTIFICATION AND REGISTRATION OF INTEREST 20

3.2.1 IDENTIFICATION OF RELEVANT ABORIGINAL STAKEHOLDERS 20

3.2.2 PUBLIC NOTICE 20

3.2.3 INVITATION TO REGISTER 21

3.3 STAGE 2: PRESENTATION OF INFORMATION 22

3.4 STAGE 3: GATHERING INFORMATION ABOUT CULTURAL SIGNIFICANCE 22

3.4.1 REVIEW OF DRAFT METHODOLOGY 22

3.4.2 INFORMATION GATHERED DURING FIELDWORK 22

3.5 STAGE 4: REVIEW OF DRAFT ACHA REPORT 22

3.5.1 STAGE 4 REVIEW OF REVISED ACHA REPORT V4 23

4 BACKGROUND INFORMATION 24

4.1 ETHNOHISTORY 24

4.2 PHYSICAL SETTING 25

4.3 DESCRIPTION OF ABORIGINAL CULTURAL HERITAGE VALUES 25

4.4 MATERIAL EVIDENCE OF ABORIGINAL LAND-USE 26

4.4.1 PREDICTIVE STATEMENTS 39

4.5 SURVEY METHODOLOGY 40

4.6 TEST EXCAVATION METHODOLOGY 40

4.6.1 TEST EXCAVATION OBJECTIVES 40
4.6.2 TEST EXCAVATION METHODOLOGY 41
4.6.3 SIEVING 41
4.6.4 RECORDING 41
4.6.5 ANALYSIS OF EXCAVATED MATERIAL 41
4.7 ARTEFACT COLLECTION AND STORAGE 42

5 ARCHAEOLOGICAL RESULTS 47
5.1 SURVEY RESULTS 47
5.2 TEST EXCAVATION RESULTS 47
5.2.1 GENTLE SLOPE SAMPLE AREA 1 48
5.2.2 CREEK TERRACE SAMPLE AREA 2 49
5.2.3 EASTERN HILL CREST 49
5.3 LITHICS ANALYSIS 54
5.3.1 RESULTS OF THE ANALYSIS 55
5.4 ABORIGINAL SITE EXTENT 59

6 ANALYSIS AND DISCUSSION 64

7 CULTURAL HERITAGE VALUES 65
7.1 BASIS FOR THE ASSESSMENT 65
7.2 ASSESSMENT OF SIGNIFICANCE 66
7.2.1 AESTHETIC SIGNIFICANCE VALUES 66
7.2.2 HISTORIC SIGNIFICANCE VALUES 67
7.2.3 SCIENTIFIC SIGNIFICANCE VALUES 67
7.2.4 SOCIAL AND SPIRITUAL SIGNIFICANCE VALUES 68
7.3 STATEMENT OF SIGNIFICANCE 68

8 PROPOSED ACTIVITY 69
8.1 LAND-USE HISTORY 69
8.2 PROPOSED ACTIVITY 71
8.3 ASSESSING HARM 71
8.3.1 ECOLOGICALLY SUSTAINABLE DEVELOPMENT 71
8.3.2 TYPES OF HARM 72
8.4 IMPACT ASSESSMENT 73

9 AVOIDING AND MINIMISING HARM 80
9.1 DEVELOPMENT OF PRACTICAL MEASURES TO AVOID HARM 80
9.2 STRATEGIES TO MINIMISE HARM 80
9.3 CUMULATIVE IMPACTS 80

10 RECOMMENDATIONS 81

REFERENCES 82

APPENDICES **86**

APPENDIX 1: CONSULTATION LOG *86*

APPENDIX 2: STAGE 1 CONSULTATION DOCUMENTATION *87*

2A: Stage 1 Agency Notices 88

2B: Stage 1 Agency Responses 89

2C: Stage 1 Notice to potential stakeholders 90

2D: Stage 1 RAP Registrations 91

2E: Notice to Heritage NSW and LALC of registered stakeholders 92

APPENDIX 3: STAGE 1 NEWSPAPER ADVERT *93*

APPENDIX 4: STAGE 2 AND STAGE 3 CONSULTATION DOCUMENTATION AND PROJECT UPDATES *94*

4A: Stage 2 & 3 Project Information and Methods 95

4B: Stage 2 & 3 RAP Responses 96

4C: Project update – 15 October 2020 97

4D: RAP Responses to project update – 15 October 2020 98

4E: Fieldwork invites and RAP responses – January 2021 99

4F: Notice to Heritage NSW of proposed test excavations 100

APPENDIX 5: STAGE 4 CONSULTATION LETTERS AND PROJECT UPDATES *101*

5A: Stage 4 RAP Review of Draft ACHAR 102

5B: Stage 4 RAP Responses to Draft ACHAR 103

5C: Project update - Stage 4 RAP Review of Revised ACHAR – Nov 2021 104

APPENDIX 6: ARCHAEOLOGICAL SALVAGE METHODOLOGY *105*

APPENDIX 7: REBURIAL LOCATION MAP *107*

APPENDIX 8: ABORIGINAL ARCHEOLOGICAL TECHNICAL REPORT *108*

FIGURES

Figure 2.1 Location of the study area 7

Figure 2.2 Topography of the study area and surrounds 8

Figure 2.3 Cadastral Information surrounding the study area 9

Figure 2.4 Identified AHIMS listings nearby to the study area 10

Figure 2.5 Mitchell Landscapes Surrounding the study area 13

Figure 2.6 Hydrology Surrounding the study area 14

Figure 2.7 Geological landscapes surrounding the study area 17

Figure 2.8 Soil landscapes surrounding the study area 18

Figure 4.1 Southern side of the study area 25

Figure 4.2 Foraging Model (Foley 1981) 27

Figure 4.3 AHIMS registered sites near the study area 38

Figure 4.4 Landscape view of the hill slope landform facing east 42

Figure 4.5 Landscape view of the gentle slope landform within the study area 43

Figure 4.6 Landscape view of the Creek terrace landform facing north 43
Figure 4.7 Landforms evident within the study area 44
Figure 4.8 Survey transect map 45
Figure 4.9 Test pit location 46
Figure 5.1 Test pits locations and artefact densities within the study area 50
Figure 5.2 Test pit 21- excavated in gentle slope (landform)-Testing area 1 51
Figure 5.3 Test pit 10 - transitional stratigraphy from gentle slope to Creek terrace 51
Figure 5.4 Test pit-8, stratigraphy in creek terrace(landform) -Testing area 2 52
Figure 5.5 North section of test pit 13 showing reddish-brown sandy clay layer 53
Figure 5.6 North section of Test Pit 7, deposition pattern of the Creek terrace area 54
Figure 5.7 Flake Percussion Length (all materials) 57
Figure 5.8 Flake Elongation 58
Figure 5.9 Landscape view of Moss vale Road Artefact Scatter near the north-eastern corner 59
Figure 5.10 Landscape view of Moss vale Road Artefact Scatter -the gentle slope 60
Figure 5.11 Landscape view of Moss vale Road Artefact Scatter- Creek Area 61
Figure 5.12 Selection of artefacts from Moss Vale Road Artefact Scatter 61
Figure 5.13 Selection of artefacts from Moss Vale Road Artefact Scatter 62
Figure 5.14 Site extent of Moss Vale Road Artefact Scatter 63
Figure 8.1 1961 Aerial Photography 74
Figure 8.2 1979 Historical Aerial Photography 75
Figure 8.3 1997 Historical Aerial Photography 76
Figure 8.4 2003 Historical Aerial Photography 77
Figure 8.5 Disturbance observed within the Hilltop landform in the study area 78
Figure 8.6 Location of Aboriginal heritage sites in relation to proposed development 79

TABLES

Table 1-1 Federal acts 2
Table 1-2 State acts 2
Table 1-3 State and local planning instruments 3
Table 1-4 Aboriginal community consultation guidelines 3
Table 2-1 Soil landscapes identified as being within the study area 16
Table 3-1 Registered Stakeholders 21
Table 4-1 Summary of relevant regional reports 29
Table 4-2 Summary of past reports in close proximity to the study area 31
Table 4-3 Analysis of AHIMS site features 35
Table 4-4 Summary of sites recorded within the study area and adjacent 36
Table 5-1 Effective Survey Coverage 47
Table 5-2 Artefact distribution for test pits with artefacts 48
Table 5-3 Summary of soil characters within the three landforms 53

Table 5-4	Terminology used in the identification of stone tools	54
Table 5-5	Artefact types and frequencies	55
Table 5-6	Summary of AHIMS listings which form Moss Vale Road Artefact Scatter	59
Table 7-1	Definitions of Burra Charter significance values (Australia ICOMOS 2013b)	65
Table 7-2	Gradings used to assess the cultural values of the study area	66
Table 8-1	Summary of past land uses within the study area and the potential impacts on archaeological resources	71
Table 8-2	Definition of types of harm	72

1 INTRODUCTION

Austral Archaeology Pty Ltd (Austral) has been commissioned by Allen Price and Scarratts Pty Ltd (the proponent) to undertake an Aboriginal Cultural Heritage Assessment (ACHA) for the property at 25 Moss Vale Road, Bomaderry, New South Wales (NSW) [the study area].

1.1 PURPOSE OF THE ACHA

The ACHA was undertaken to assess the potential harm that may occur to Aboriginal cultural heritage values as part of a Development Application (DA) being prepared under Part 4 of the *Environmental Planning and Assessment Act 1979* (EPA Act) for the residential subdivision of the study area. The boundary of the study area is defined by lot boundaries of Lot 1, DP520502, Lot 110, DP131219, and Lot 129, DP3060. The ACHA is required based on the recommendations of an Aboriginal Archaeological Technical Report undertaken by (Austral Archaeology 2020).

The project involves the subdivision and development of the study area into residential housing, along with a bowling green and a council office.

It is understood that these proposed works will involve:

- large scale groundworks including extensive earth excavation and levelling;
- The installation of infrastructure, such as houses, widening of roads; and,
- The clearance of existing vegetation within areas marked for development.

1.2 ASSESSMENT OBJECTIVES

The scope of this ACHA report is based on the legal requirements, guidelines and policies of the Heritage NSW, formerly the Office of Environment and Heritage (OEH), formerly, the Department of Environment, Climate Change and Water (DECCW), Department of Environment and Climate Change (DECC) and Department of Environment and Climate (DEC).

The guiding document for this assessment is the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011b) [the Guide], the *Code of Practice for the Investigation of Aboriginal objects in NSW* (DECCW 2010c) [the Code of Practice] and the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010b) [the Consultation Requirements].

Information provided in this assessment includes, but is not limited to:

- A description of the Aboriginal objects and/or places within the study area.
- A description of the Aboriginal cultural heritage values, including the significance of Aboriginal objects, places and values identified by the ACHA.
- Documentation of how the Consultation Requirements have been met (specifically Section 60 of the *National Parks and Wildlife Regulation 2019* [NPW Regulation]).
- The views of Aboriginal people regarding the likely impact of the proposed activity on their cultural heritage, including evidence of their submissions and how these have been addressed.
- An assessment of harm posed to Aboriginal objects, places or values as part of the project.
- Establishing the archaeological potential mapping on the basis of subsurface testing within the study area.
- A description of practical measures that have been used to protect, conserve, avoid or mitigate harm to Aboriginal objects, places and values within the study area.

1.3 SUMMARY OF LEGISLATIVE PROCESS

Aboriginal archaeological and cultural heritage assessments in NSW are carried out under the auspices of a range of State and Federal acts, regulations and guidelines. The acts and regulations allow for the management and protection of Aboriginal places and objects, and the guidelines set out best practice for community consultation in accordance with the requirements of the acts.

This section outlines the Australian acts and guidelines that are applicable or have the potential to be triggered with regards to the proposed development are detailed in Table 1-1 to Table 1-4.

Table 1-1 Federal acts

Federal Acts:	Applicability and implications
Environment Protection and Biodiversity Conservation Act 1999	This act has not been triggered and so does not apply, as: • No sites listed on the National Heritage List (NHL) are present or in close proximity to the study area. • No sites listed on the Commonwealth Heritage List (CHL) are present or in close proximity to the study area.
Aboriginal and Torres Strait Islander Heritage Protection Amendment Act 1987	Applies: This Act provides blanket protection for Aboriginal heritage in circumstances where such protection is not available at the state level. This Act may also override state and territory provisions.

Table 1-2 State acts

State Acts:	Applicability and implications
National Parks and Wildlife Act 1974 (NPW Act)	Applies, due to: • Section 86 – Prohibits both knowingly and unknowingly, causing harm or desecration to any Aboriginal object or place without either an AHIP or other suitable defence from the Act. • Section 87 – Allows for activities carried out under an AHIP or following due diligence to be a defence against the harm of an Aboriginal object. • Section 89A – Requires that the Heritage NSW must be notified of any Aboriginal objects discovered, within a reasonable time. • Section 90 – Requires an application for an AHIP in the case of destruction of a site through development or relocation.
National Parks and Wildlife Regulations 2019 (NPW Regulation)	Applies, due to: • Section 57-58 – States minimum standards of due diligence to have been carried out • Section 60 – Requires Aboriginal community consultation process to be undertaken before applying for an AHIP. • Section 61 – Requires production of a cultural heritage assessment report to accompany AHIP applications.
The Environmental Planning and Assessment Act 1979 (EPA Act 1979)	Applies, due to: • This project is being assessed under Part 4 / 5 of the EPA Act. • Sections 86, 87, 89A and 90 of the NPW Act will apply. • The Part 5 Guidelines will not apply.
NSW Heritage Act 1977	There are no sites listed on the State Heritage Register associated with the study area, and therefore Section 57 of this act does not apply.

Table 1-3 State and local planning instruments

Planning Instruments	Applicability and implications
Local Environmental Plans (LEP)	The following LEP is applicable: • *Shoalhaven LEP 2014*
Development Control Plans (DCP)	The following DCP is applicable: • *Shoalhaven City Council DCP 2014*

Table 1-4 Aboriginal community consultation guidelines

Guidelines	Applicability and implications
Consultation Requirements	The development is to be conducted in accordance with Part 4 of the EPA Act. As the project is to be assessed under Part 6 of the NPW Act, approvals under Section 90 of the NPW Act as amended 2010 will be required, S89A of the Act will apply, and the Part 4 Guidelines will apply.

1.4 PROJECT TEAM AND QUALIFICATIONS

The following personnel have been involved in the preparation of this ACHA.

SEJAL PANDYA (B. ARTS (ARCH), GRAD DIP ARCHAEOLOGY, MA. ARCHAEOLOGY)

Sejal is an Archaeologist at Austral and has 7 years of experience in the completion of Aboriginal projects and other archaeological projects in India. She has worked on both NSW and Victorian projects preparing Aboriginal Heritage Due Diligence Advice, ACHAs and Cultural Heritage Management Plans. Sejal has contributed to reports completed in accordance with the NPW Act and its associated guidelines. This includes ensuring that consultation and reporting comply with the Code of practice for the investigation of Aboriginal objects in NSW and Aboriginal consultation requirements for proponents 2010. Sejal has also worked within the *Victorian Aboriginal Heritage Act 2006* and the *Aboriginal Heritage Regulations 2018* for Victorian consultation and reporting.

Sejal has extensive experience working in the field and conducting archaeological excavations and standard assessment for different scale projects. Through the completion of these projects, Sejal has developed relationships with Aboriginal Stakeholders, Heritage NSW and Aboriginal Victoria.

PAUL HOWARDS (MA. ARCH, B. SCI)

Paul Howard is a senior archaeologist at Austral who has experience in the completion of Aboriginal and historical projects in Australia and in the USA. Paul has over 12 years' experience and has coordinated with clients on a multitude of projects including roads, residential, government, utility, and mining works. Paul has worked under various legislative contexts including the NPW Act, conducting Aboriginal due diligence assessments, stakeholder consultation and ACHAs. He has assisted in mitigating impacts to significant Aboriginal sites through monitoring and recording the relocation of 43 axe grinding grooves for the expansion of a coal mine located in Werris Creek, NSW. These were relocated to a local information centre and can be viewed by the public.

Paul has worked predominately in NSW, particularly the Illawarra and South Coast region. He has conducted monitoring of rock art sites to determine subsidence impacts from mining in the Illawarra escarpment. Paul has undertaken test excavations for the Tallawarra shareway development on Lake Illawarra and the Whytes Gully Landfill Expansion, with various coastal monitoring projects including the Bulli erosion reinforcement, and the Shone Avenue Road Widening for Wollongong City Council. Paul has also conducted numerous archaeological assessments on liner projects in Australia and the USA.

DAVID MARCUS (B.A. (HONS.) ARCHAEOLOGY, MA. ARCHAEOLOGY)

David is a Director of Austral with significant experience in both Aboriginal and historical cultural heritage projects. David started his career in archaeology in 2000 and has worked in all roles from field assistant through to project manager. He commenced work for Austral Archaeology in 2010 and has been responsible for all aspects of the day-to-day running of Austral Archaeology. David

also has high-level skills in both physical and digital mapping and integration of digital data into GIS. His eye for detail has led to David undertaking all quality assurance reviews for Austral reports.

David has reviewed this report for quality assurance and technical adequacy and had input into the management recommendations.

DOUG WILLIAMS (B.A. (HONS.) ARCHAEOLOGY, GRAD DIP (ARCH), PHD CANDIDATE (ARCHAEOLOGY)

Doug has been a professional archaeologist and heritage manager since 1992 and has undertaken archaeological projects in New South Wales, ACT, Western Australia, Victoria and South Australia. He is currently completing a PhD in a field area in southwest Queensland. In addition to running consulting archaeology firms, Doug was Victoria's Senior Project Archaeologist from 1998-2000 (Aboriginal Affairs Victoria) and Executive Officer for the Willandra Lakes Region World Heritage Area from 2000-2004 (NSW National Parks and Wildlife Service). Doug has well-developed skills in archaeological survey, field recording, artefact identification/analysis, all scales of archaeological excavation and associated documentation, and GIS-based field recording.

Doug has reviewed this report for quality assurance and technical adequacy and had input into the management recommendations.

1.5 ABBREVIATIONS

The following are common abbreviations that are used within this report:

AAR	Aboriginal Archaeological Report
AGD	Australian Geodetic Datum
ACHA	Aboriginal Cultural Heritage Assessment
ACHDDA	Aboriginal Cultural Heritage Due Diligence Assessment
AHIP	Aboriginal Heritage Impact Permit
ATTSICC	The Aboriginal and Torres Strait Islander Consultative Committee
BP	*Before Present*
Burra Charter	*Burra Charter: Australia ICOMOS Charter for Places of Cultural Significance 2013*
CBD	Central Business District
Consultation Requirements	*Aboriginal Cultural Heritage Consultation Requirements for Proponents*
Code of Practice	*Code of Practice for the Investigation of Aboriginal Objects in NSW*
CMA	Catchment Management Authority
CHL	Commonwealth Heritage List
DA	Development Application
DCP	Development Control Plan
DECCW	Department of Environment, Climate Change and Water
DoP	Department of Planning
DPIE	Department of Planning, Industry and Environment
EPA Act	*Environmental Planning and Assessment Act 1979*
EPBC Act	*Environmental Protection and Biodiversity Act 1999*
EPI	Environmental Planning Instrument
GDA94	Geocentric Datum of Australia 1994
Guide to Reporting	*Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*
Heritage Act	*NSW Heritage Act 1977*
ICOMOS	International Council on Monuments and Sites
LEP	Local Environmental Plan
LGA	Local Government Area
NHL	National Heritage List
NPW Act	*National Parks and Wildlife Act 1974*
P**AD**	Potential Archaeological Deposit
The Proponent	Allen Price and Scarratts
Study Area	25, Moss Vale Road, Bomaderry, NSW
2014 DCP	*Shoalhaven Development Control Plan 2014*
2014 LEP	*Shoalhaven Local Environmental Plan 2014*
TP	*Test Pits*

2 DESCRIPTION OF THE AREA

The following section defines the study area, its environmental and cultural context.

2.1 THE STUDY AREA

The study area consists of the entirety of 25 Moss Vale Road (Lot 1, DP 520502, Lot 110, DP131219, Lot 129, DP3060), Bomaderry, NSW, located approximately 55 kilometres south of Wollongong and approximately 5 kilometres north of the Nowra central business district (CBD) within the Shoalhaven City Council Local Government Area (LGA), the Parish of Cambewarra, and the County of Camden. It is also within the boundaries of the Nowra Local Aboriginal Land Council (NLALC). The study area is abutted to the south and east by woodland, to the north by the Moss Vale Road and Bomaderry Creek to the west.

The location of the study area is shown in Figure 2.1, Figure 2.2, and Figure 2.3.



Figure 2.1 Location of the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Cultural Heritage Assessment Report

Source: NSW DFSI Aerial and Basemap *Drawn by: WA* *Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY



Figure 2.2 Topography of the Study Area and Surrounds

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Cultural Heritage Assessment Report

Source: NSW DFSI Basemap *Drawn by: WA* *Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

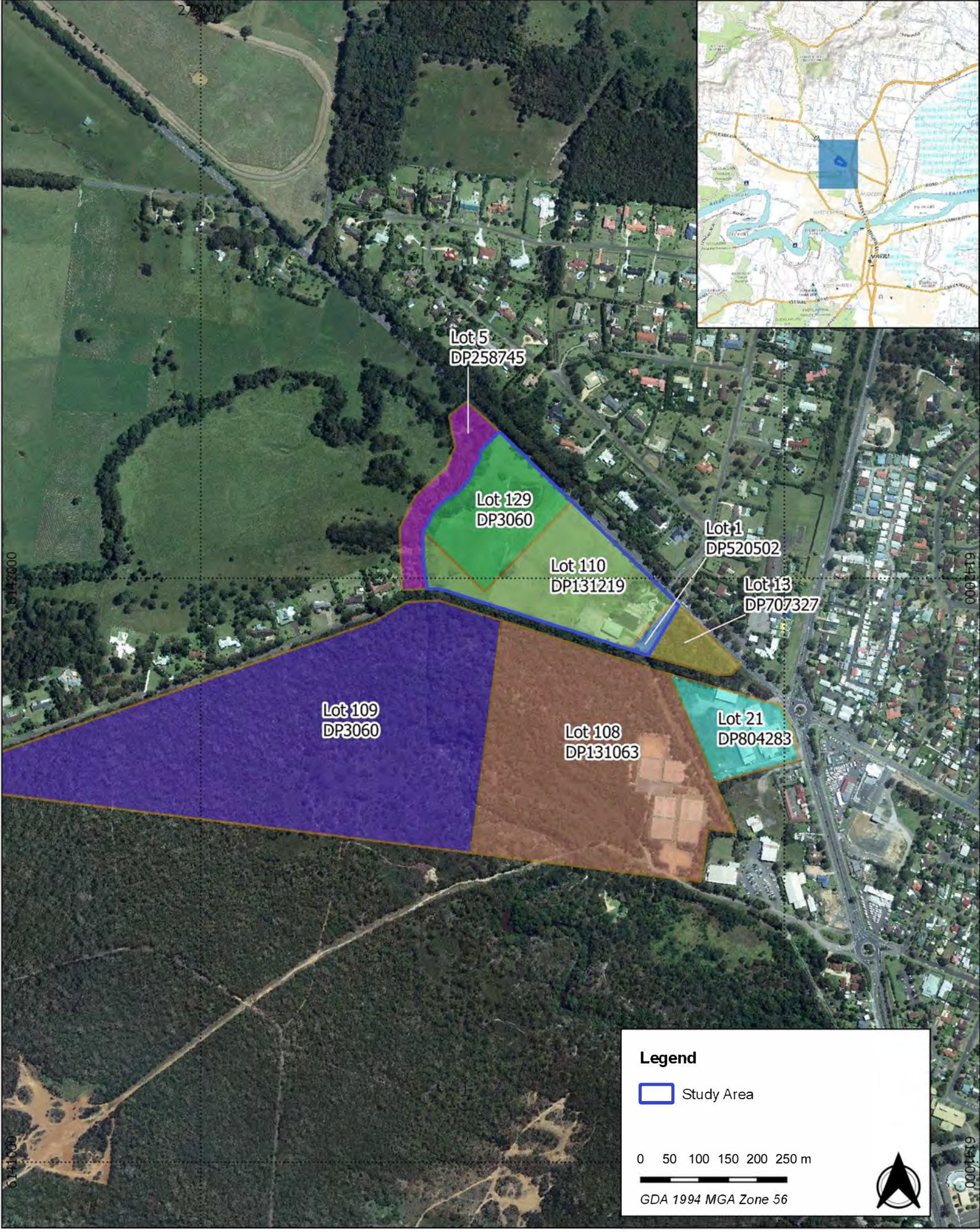


Figure 2.3 Cadastral Information Surrounding the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Cultural Heritage Assessment Report

Source: NSW DFSI Basemap and DCDB Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY

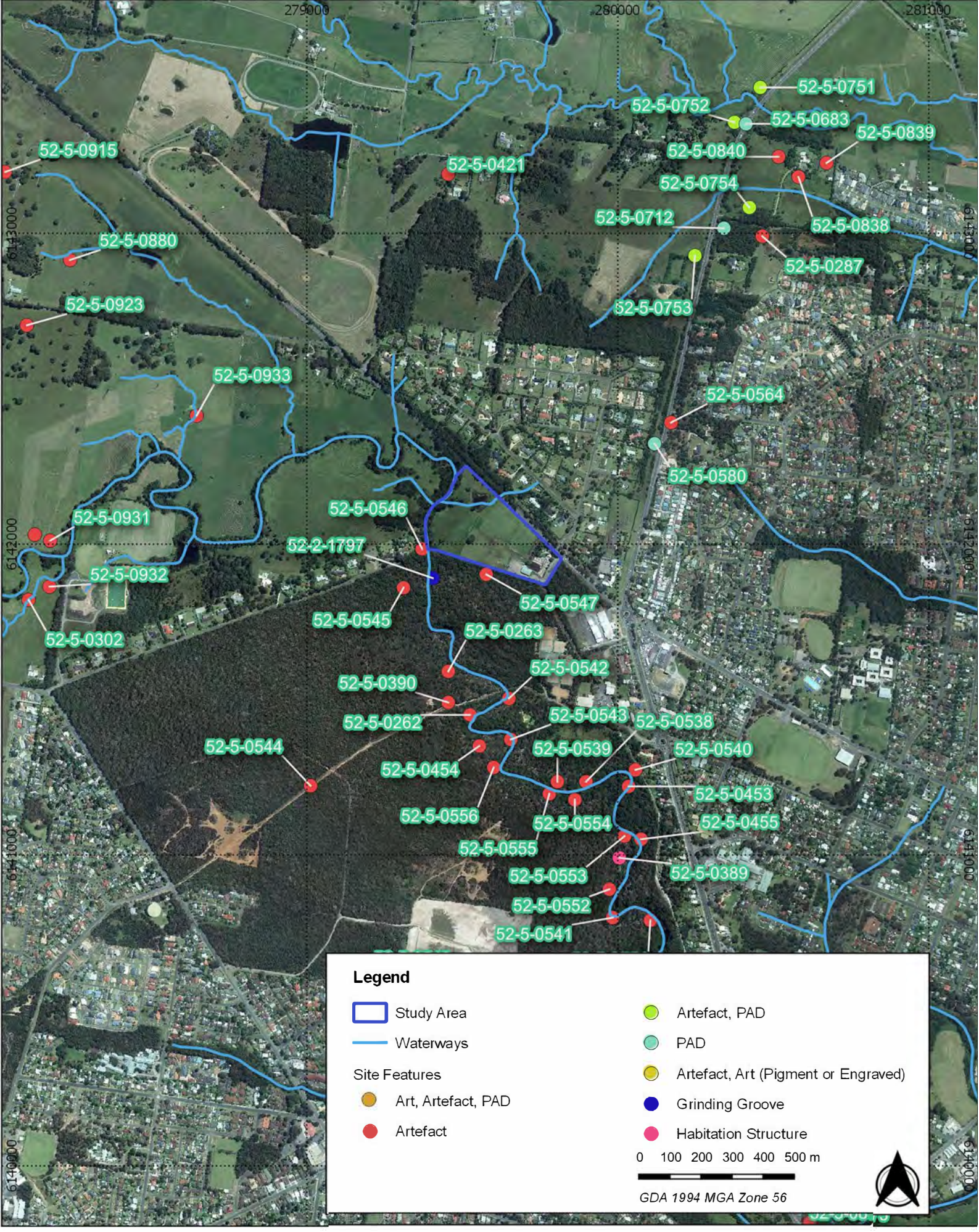


Figure 2.4 Identified AHIMS Listings Nearby to the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Cultural Heritage Assessment Report

Source: NSW DFSI Aerial; AHIMS *Drawn by: WA* *Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

2.2 ENVIRONMENTAL CONTEXT

The following section discusses the study area in relation to its landscape, environmental and Aboriginal landscape resources. This environmental context has been prepared in accordance with Requirement 2 of The Code (DECCW 2010a, pp.8–9).

The natural environment of an area influences not only the availability of local resources, such as food and raw materials for artefacts but also determines the likely presence and/or absence of various archaeological site types which may be encountered during a field investigation.

Resource distribution and availability are strongly influenced by the environment. The location of different site-types (such as rock-shelters, middens, open camp sites, grinding grooves, engravings etc) are strongly influenced by the nature of soils, the composition of vegetation cover and the climatic characteristics of any given region. Equally important is the range of other associated characteristics which are specific to different land systems and their geology. In turn, this affects resource availability of, for example, fresh drinking water, plant and animal foods, raw materials for stone tools, wood and vegetable fibre used for tool production and maintenance.

Therefore, examining the environmental context of an area is essential in accurately assessing potential past Aboriginal land-use practices and/or predicting site types and distribution patterns within any given landscape, cultural or not. The information that is outlined below is applicable for the assessment of the site potential of the current study area.

2.2.1 TOPOGRAPHY AND HYDROLOGY

The study area is located in the southern section of the Sydney Basin. It is characterised by level to gently undulating riverbeds and banks as well as active floodplains (Hazelton et al. 1992). The eastern portion of the study area is placed in the Nowra geological landscape. This landform is characterised by the level ground that gently rises into hills that are on sandstone ((Hazelton et al. 1992, p.81).

The local area currently has residential areas and agricultural areas as well as sections of bushland. The study area is located adjacent to Moss Vale Road and is bordered on the south side by the Bombaderry Regional Park. Bombaderry Creek (4th order creek) is also adjacent to the study area to the west, and connects to the Shoalhaven River, south of the study area. There are two dams located within the study area. The site has been used for agricultural activities, with stock/sale yards located within the study area.

The study area has an elevation of approximately 50 metres Australia Height Datum (AHD) at the southern boundary end of the site and approximately 30 metres AHD at the north-western end (Construction Sciences 2020).

The Mitchell landscapes units identified within the study area are identified in Figure 2.5.

The study area is located within the Shoalhaven River catchment area, which has its source in the rugged terrain of Braidwood and flows for 300 kilometres generally in a north-easterly direction into the Pacific Ocean east of Nowra. The Shoalhaven River has a catchment area of approximately 7,250 kilometres², making it the 6th largest coastal catchment in NSW. The Shoalhaven River has two mouths – one permanently open at Crookhaven Heads: the other intermittently open at Shoalhaven Heads, approximately 5 kilometres further north. The Shoalhaven River rises in the Southern Tablelands at an altitude of 864 metres above sea level. Four main tributaries drain into the Shoalhaven River Catchment including the Mongarlowe River, Corang River, Endrick River and Kangaroo River. Other main tributaries include Ettrema Creek, Boro Creek, Bomaderry Creek and Reedy Creek.

The major watercourse in the vicinity of the study area is Bomaderry Creek, which flows south-east into the Shoalhaven River. Bomaderry Creek is a 4th order stream, which runs in an east-west alignment and abuts the study area to the west. There is a 1st order tributary that feeds Bomaderry Creek which passes through the north-western portion of the study area and is the source of water for one of the two dams.

The alluvial flats adjacent to Bomaderry Creek are likely to be prone to flooding events. Flood study and management plans of Bomaderry Creek have been completed by BMT WBM in 2010 and Cardno in 2016 (BMT WBM Pty Ltd 2010, Cardno 2016). These studies used annual rainfall, streamflow records and historical research to predict the likelihood of flooding and the extent of an area that flooding will impact. Both studies have shown that parts of the alluvial flats immediately adjacent to Bomaderry Creek have the potential to experience flood events every five, 20 and 100 years (Cardno 2016, p.5). The areas that are susceptible to flooding are less likely to contain Aboriginal sites when compared to the elevated hill crests north of the creek lines that are unaffected by flooding. Furthermore, any potential sites within the areas that are prone to flooding will have also been disturbed by flooding events in the past, which would lead to more disturbed archaeological sites and deposits.

The hydrological systems identified within and in the locality of the study area are identified in Figure 2.6.

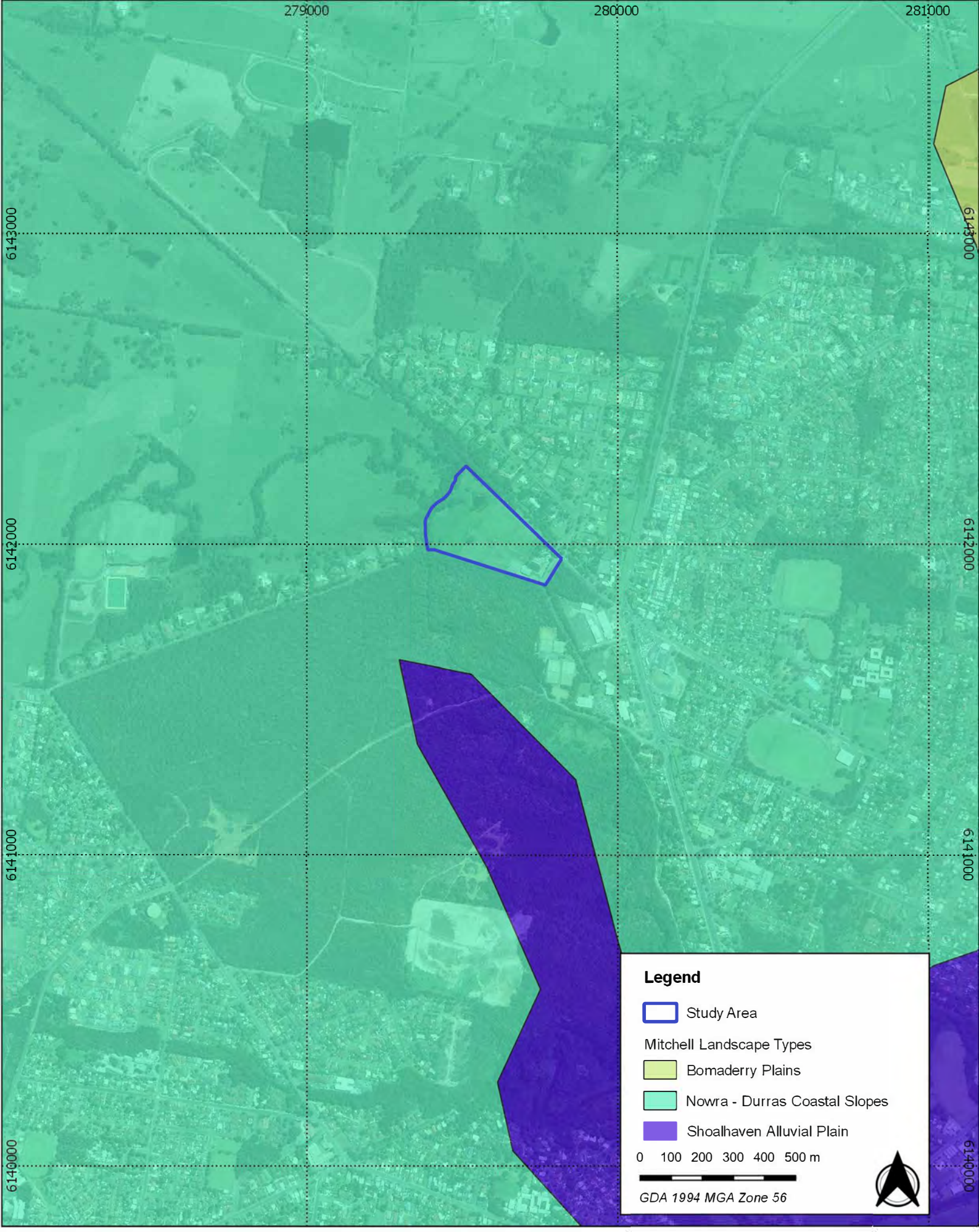


Figure 2.5 Mitchell Landscapes Surrounding the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Survey Report

Source: NSW DFSI Aerial; Mitchell Landscapes V3.1

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY



Figure 2.6 - Hydrology Surrounding the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Cultural Heritage Assessment Report

Source: NSW DFSI Aerial; NSW DCDB *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

2.2.2 GEOLOGY AND SOILS

The study area is located within 3 geological formations: the Quaternary alluvial floodplain (Qaf) geological formation in the eastern section of the study area, the Permian Berry Siltstone (Pshb) formation in the central section and Nowra sandstone (Pshn) in the western section of the study area. The Quaternary alluvial floodplain is a geological formation that is less than 2.5 million years old and contains current and recent mud, silt, sand and gravel deposited by river systems (Troedson & Deyssing 2015). The Permian Berry Siltstone formation is aged between 264 and 265 million years and contains siltstones and shelf deposits of fluvial sands and gravel (Rowling 2010). The Nowra Sandstone formation ranges from 265 to 267 million years and contains sandstone that is coarse and pebbly quartzose (Rowling 2010).

The geological formations within the study area lack an abundance of rock types useful for stone tools manufacturing such as silcrete, quartz and chert, and are consequently unlikely to contain any potential quarry sites.

The geological units identified within the study area are shown in Figure 2.7.

There are 2 different soil landscapes within the study area, the Shoalhaven soil landscape and the Nowra soil landscape.

2.2.2.1 SHOALHAVEN

The Shoalhaven sandstone landscape takes up the western portion of the study area and is moderately deep and between 500 millimetres to 1 metre. It consists of 6 dominant soil formations: Prairie, Red Earths and Yellow and Red Podzolic, Alluvial and Gleyed Podzolic Prairie soils found on levees, Red Earths and Yellow and Red Podzolic Soils found on the terraces as well as alluvial Soils and Gleyed Podzolic (potential Acid Sulphate) Soils located on the floodplains (P.A. Hazelton & Tille 1990).

The Shoalhaven soil landscape is characterised by 4 different forms within the soil profile. This profile includes sf1, a brownish black to brown colour that is a fine sandy loam that exhibits hard setting behaviour; sf2, a brown to yellowish brown colour that this a weakly pedal light sandy clay loam; sf3, a yellowish-brown sandy clay; and sf4, a reddish-brown colour with a moderately pedal medium clay (P. A. Hazelton & Tille 1990).

2.2.2.2 NOWRA

The Nowra soil landscape is a coarse grained, horizontally bedded sandstone that often contains quartz pebbles (McElroy et al. 1969). The soil landscape takes up the eastern portion of the study area and is also moderately deep, being between 500 millimetres to 1 metre. It consists of Brown Podzolic Soils which occur on crests and upper slopes, Soloths and/or Yellow Earths which occur on midslope and Yellow Podzolic Soils that occur on lower slopes and drainage lines (P. A. Hazelton & Tille 1990).

The Nowra soil landscape is characterised by 7 forms within the soil profile. This includes; 1, a yellowish-brown loose single-grained sand; 2, a yellowish-brown clayey sand that is gravelly and exhibit hard-setting behaviour; 3, a dark reddish-brown loam that is fine sandy; 4, a light clay that is mottled; 5, a dark olive sandy clay; 6, a bright brown to dark olive moderately pedal medium clay; and; 7, a brown sandy clay loam (P. A. Hazelton & Tille 1990).

The layers of the soil are crests and upper slopes, midslopes and lower slopes and drainage lines and floodplain. The crests and upper slopes feature a maximum of 400 millimetres of hard-setting dark reddish-brown fine sandy loam overlying up to 300 millimetres of dark olive sandy clay, which overlies on a bright brown moderately pedal light-medium clay with Brown Podzolic clear Boundaries; Midslopes have up to 100 millimetres of loose yellow sand overlying hard-setting gravelly yellowish-brown clayey sand, a bright brown moderately pedal light-medium clay with clear boundaries from Soloths to Yellow Earths; the lower slopes and drainage lines have up to 150 millimetres of loose yellow-brown single-grained sand overlying a maximum of 150 millimetres of brown sandy clay loam, in turn overlying up to 700 millimetres light clay with mottles and clear boundaries with Yellow Podzolic Soils; higher elevations have less than 200 millimetres of fine sandy loam, which overlies up to 800 millimetres of dull reddish brown sandy clay loam with a gradual Red Earth boundary. The Nowra landscape has moderately to gently undulating rises to low hills on Nowra Sandstone with a relief of less than 40 metres and slopes less than 5% (Hazelton et al. 1992, p.81).

The soil landscapes identified within the study area are identified in Table 2-1 and Figure 2.8.

Table 2-1 Soil landscapes identified as being within the study area

Soil landscape	Description
Shoalhaven	It is characterised by Shoalhaven sandstone and can be seen in 4 different forms within a soil profile. Brownish black to brown colour fine sandy loam to a brown/yellowish brown colour weakly pedal light sandy clay, also seen as yellowish-brown sandy clay and lastly can also be seen as reddish brown moderately pedal medium clay.
Nowra	It is a coarse grained, horizontally bedded sandstone often containing quartz pebbles.

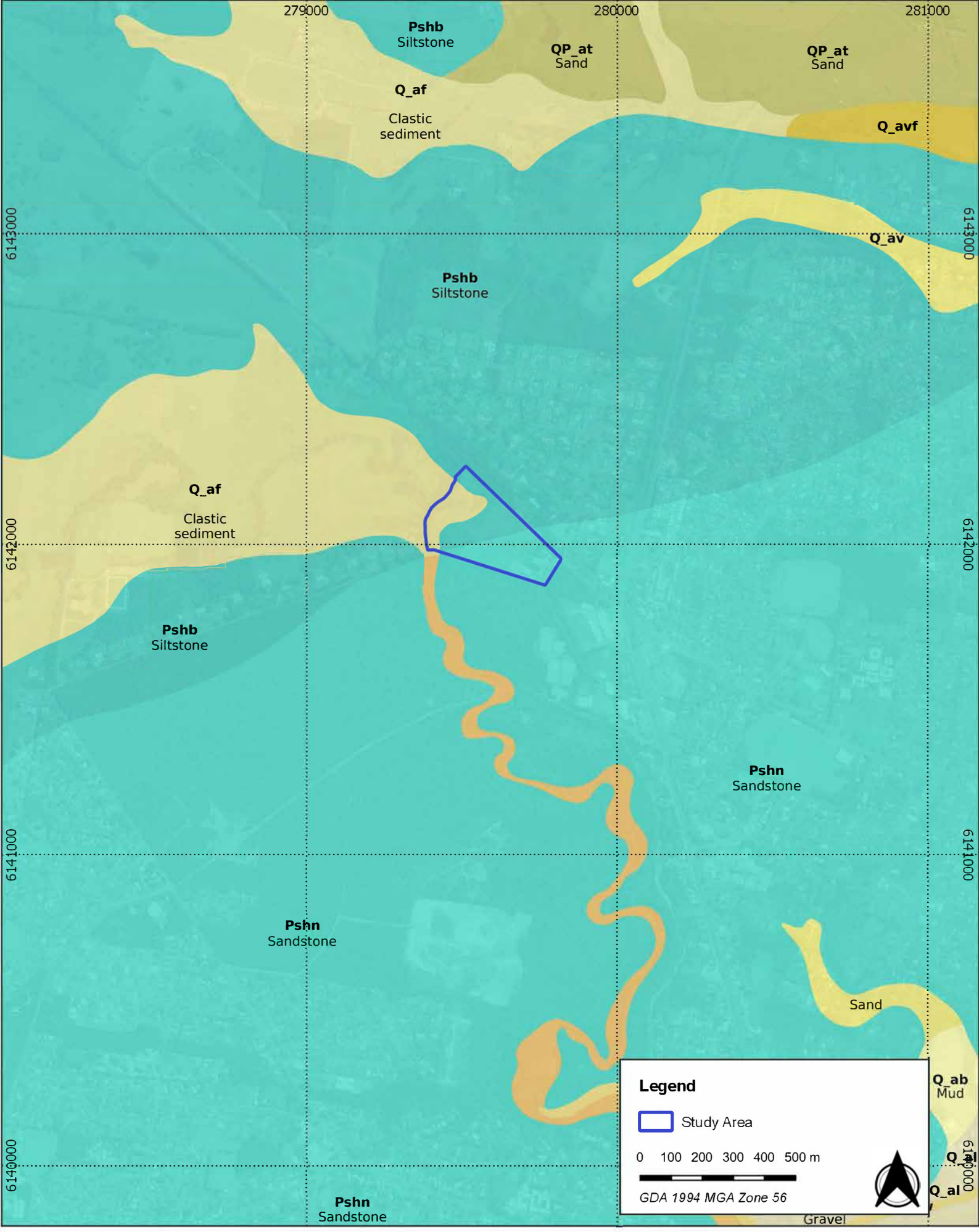


Figure 2.7 - Geological Landscapes Surrounding the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Cultural Heritage Assessment Report t

Source: NSW DFSI Aerial; NSW eSpade *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

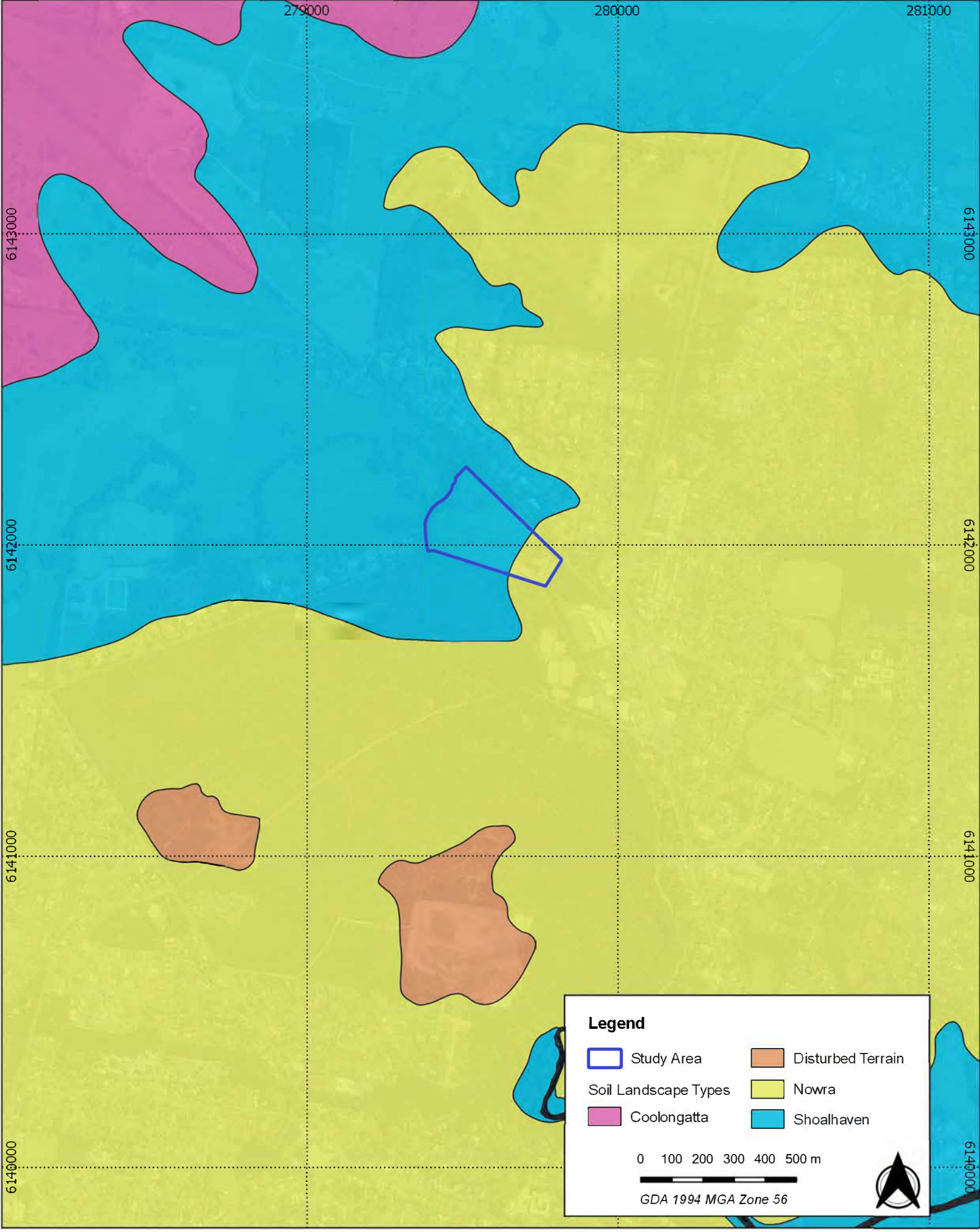


Figure 2.8 - Soil Landscapes Surrounding the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Cultural Heritage Assessment Report

Source: NSW DFSI Aerial; NSW SEED *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

2.2.3 CLIMATE AND VEGETATION

The climate of the Nowra region is warm-temperate, ranging from about 20 to 26 ºCelsius in the summer, and 10 to 16 ºCelsius during winter. Rainfall totals are highest in the autumn and summer months, with averages of around 1,200 millimetres to 1,600 millimetres in areas near Nowra (Bureau of Meteorology n.d.). The statistical data from 1901 until recent times shows a gradual increase in temperature in the region. The mean maximum temperature between 1901 and 1930 ranged from 16.8 to 27.5º Celsius. The moderate climate of the region would have allowed Aboriginal people to use the study area to move between the coastline and further inland through the Cambewarra range, along the Shoalhaven River.

2.2.4 FLORA AND FAUNA

Prior to the removal of the natural vegetation, the ecological diversity of the area would have provided a wide range of resources for Aboriginal people. The Shoalhaven landscape is almost completely cleared except for small concentrations of *Melaleuca quinquenervia* (decorative paperbark), *Quercus bicolor* (swamp oak), *Brachychiton acerifolius* (Illawarra flame trees) and various reeds. Similarly, the Nowra landscape has also been nearly completely cleared, however still retains several species of trees including *Syncarpia glomulifera* (turpentine), *Eucalyptus punctata* (grey gum), *Corymbia maulata* (spotted gum), *Eucalyptus piperita* (Sydney peppermint), *Eucalyptus obliqua* (thin-leaved stringybark), *Corymbia gummifera* (red bloodwood), *Allocasuarina toruloa* (forest oak) and *Eucalyptus piluaris* (blackbutt) (Department of Environment and Conservation 2005a). The soft, spongy bark of the Illawarra flame tree was used to make nets and fishing lines, while sap from the red bloodwood trees was utilised to tan fishing nets and stain artefacts. Swamp oak bark provided material for canoe making and paperbark bark was used for bedding and blankets (Department of Environment and Conservation 2005a). Many of the vegetation species found within the vicinity of the study area were crucial for Aboriginal people and were used for numerous purposes as well as providing habitat for faunal resources (Attenbrow 2003).

The study area and its surrounds would have provided habitats for mammals including kangaroos, brush-tail possums, sugar gliders and common wombats, and the rivers and creeks nearby would provide access to additional faunal resources such as fish species, a range of water birds and a variety of lizards. These resources would have provided food for Aboriginal people travelling between the coastline and further inland along the Shoalhaven River and its tributaries (Attenbrow 2003).

As well as being important food sources, animal products were also utilised for tool making and the production of ceremonial items. Examples include ‘bone points’, which would have functioned as awls or piercers, as well as tail sinews, which were used to make fastening cords. Animals such as brush-tailed possums were highly prized for their fur, with possum-skin cloaks (Attenbrow 2003).

3 CONSULTATION PROCESS

This section outlines the consultation process that has been followed as part of the preparation of this ACHA.

3.1 INTRODUCTION

Stakeholder consultation for this project commenced in line with the Consultation Requirements (DECCW 2010b). Heritage NSW (2010b, p.iii) recognises that:

- Aboriginal people should have the right to maintain their culture.
- Aboriginal people should have the right to participate in matters that may affect their heritage directly.
- Aboriginal people are the primary determinants of the cultural significance of their heritage.

The Consultation Requirements outline a four-stage consultation process which includes:

- Stage 1 – Notification of the project proposal and registration of interest.
- Stage 2 – Presentation of information about the proposed project.
- Stage 3 – Gathering information about cultural significance.
- Stage 4 – Review of the draft cultural heritage assessment report.

Appendices 1 to 5 contains a consultation log and evidence of all correspondences that were sent and received as part of the consultation process.

3.2 STAGE 1: NOTIFICATION AND REGISTRATION OF INTEREST

The following section outlines the tasks that were undertaken as part of Stage 1 of the Consultation Requirements.

3.2.1 IDENTIFICATION OF RELEVANT ABORIGINAL STAKEHOLDERS

In accordance with the Consultation Requirements the following bodies were notified as part of the project proposal:

- The Nowra Local Aboriginal Land Council
- Heritage NSW
- Shoalhaven City Council
- Local Land Services
- National Native Title Tribunal
- Native Title Services
- Office of the Registrar of Aboriginal Land

A response was received from Heritage NSW with a list of 53 stakeholders with a potential interest in the proposed development. The NLALC was contacted via phone by Neil Fenley (Senior Archaeologist, Austral Archaeology)

The South East Local Land Services Catchment Management Authority replied with the Shoalhaven LGA stakeholder list who may have an interest in the proposed development.

The Shoalhaven City Council responded with an automated reply. The National Native Title Tribunal replied with a list of stakeholders who may have an interest in the proposed development.

3.2.2 PUBLIC NOTICE

An advert was placed in the *Illawarra Mercury*, to run on 18 March 2020, requesting the registration of cultural knowledge holders relevant to the project area. A copy of this advert is included in Appendix 3 of this report.

3.2.3 INVITATION TO REGISTER

Letters were also written to the relevant agencies suggested in Section 4.1.2 of the Consultation Requirements (DECCW 2010b) on 19 March 2020 and a search was made of the Native Title Tribunal on the same day.

As a result of the consultation procedure, the following groups and individuals shown in Table 3-1 registered as Aboriginal stakeholders with an interest in this project:

Table 3-1 Registered Stakeholders

Organisation	Person
Badu (Murrin Clan/Peoples)	Karia Lea Bond
Barraby Cultural Services	Lee Field
Batemans Bay LALC	NA
Biamanga	Seli Storer
Cullendulla	Corey Smith
Darug Land Obervations	Anna O'Hara
Dharug	Andrew Bond
Gadhu Dreaming	Gordon Campbell
Goobah Development Pty Ltd	Basil Smith
Gumaraa	Jodie Edwards and Lisa Bazzano
Gundungurra Tribal Technical Services	Christopher Payne
Gundungurra Tribal Technical Services	David Bell
Gundungurra Tribal Technical Services	Larry Hoskins
Gundungurra Tribal Technical Services	Peter Foster
Gundungurra Tribal Technical Services	Pimmy Johnson Bell
Gundungurra Tribal Technical Services	Sam Wickman
Gundungurra Tribal Technical Services	Teangi Mereki Foster
Gunyuu	Kylie Ann Bell
Guunamma Dreaming Sites and Surveying	Richard Campbell
Jerringong	Jodi Anne Stewart
Jerrinja LALC	Alfred Wellington
Karrial	Karrial Johnson
Leanne Tungai	Leanne Tungai
Minnamunnung	Aaron Broad
Munyunga	Kaya Dawn Bell
Murra Bidgee Mullangari Aboriginal Corporation	Ryan Johnson and Darleen Johnson
Murramarang	Roxanne Smith
Murrumbul	Mark Henry
Nowra LALC	NA
Nundagurri	Newton Cariage
Pemulwuy	Pemulwuy Johnson
Shoalhaven Elders and Friends Organisation	Gordon Wellington
South Coast NSW Aboriginal Elders	Owen Carriage
South West Rocks Corporation	Edward Moran
Thoorga Nura	John Carriage
Three Ducks Dreaming Surveying and Consulting	Leonard Wright

Tungai Tonghi	Troy Tungai
Ulladulla LALC	NA
Walbunja	Hika Te Kowhai
Walgalu	Ronald Stewart
Warra Bingi Nunda Gurri	Nathanial Kennedy
Wingikara	Hayley Bell
Wullung	Lee Roy James Boota
Yerramurra	Blaan Davis
Yurrandaali Cultural Services	Bo Field
Individual	Darryl Caines
Individual	Gary Caines
Individual	Gayle Watts
Individual	Noel Butler
Individual	Noel Webster
Individual	Simalene Carriage
Individual	Ronald Carberry
Individual	Clive Freeman

3.3 STAGE 2: PRESENTATION OF INFORMATION

All registered Aboriginal stakeholders were provided with information outlining the proposed works, including information relating to proposed impacts as well as the project's methodology on 17 April 2020.

Copies of all correspondence relating to the provision of project information to registered Aboriginal stakeholders are included in Appendix 4 of this report.

3.4 STAGE 3: GATHERING INFORMATION ABOUT CULTURAL SIGNIFICANCE

3.4.1 REVIEW OF DRAFT METHODOLOGY

On 17 April 2020, Austral provided each Aboriginal stakeholder with a copy of the project methodology. The methodology outlined the proposed assessment process that would be used in the completion of the project. Aboriginal stakeholders were provided with 28 days to review and provide feedback on the methodology.

Copies of all correspondence relating to the draft methodology from Aboriginal stakeholders are included in 4 of this report.

Blaan Davis (Yerramurra), Bo Field (Yurrandaali Cultural Services), Lee Field (Barraby Cultural Services**)** and Ryan Johnson (Murra Bidgee Mullangari Aboriginal Corporation) replied back with agreement and acceptance of the methodology suggested for Stage 3.

Ronald Carberry (Individual) and Clive Freeman (Individual) also responded. Ronal Carberry contacted Neil Fenley (Senior Archaeologist, Austral) via phone and Clive Freeman via email to Hayley Hunter (Operation Manager, Austral) for the acceptance and agreement of the methodology.

3.4.2 INFORMATION GATHERED DURING FIELDWORK

No cultural information was received during the field work.

3.5 STAGE 4: REVIEW OF DRAFT ACHA REPORT

All registered Aboriginal stakeholders have received all relevant information regarding the assessment of the study area and the results of the archaeological assessment. Copies of all correspondence relating to the Stage 4 consultation process with registered Aboriginal stakeholders are included in Appendix 5 of this report.

One response was received following the commencement of stage 4 of the consultation process. An email was received from Richard Campbell stating that he has no questions about the project.

The final ACHA and AAR were sent out to the registered Aboriginal stakeholders, as per the Consultation Requirement for their feedback. Consultation letters are attached as Appendix 5.

3.5.1 STAGE 4 REVIEW OF REVISED ACHA REPORT V4

The ACHA and AAR were subsequently revised to address feedback received from Heritage NSW in the form of several requests for additional information to support the Integrated Development Application (IDA) for the project including:

- DOC21/8097-7 dated 9 November 2021
- DOC21/8097-7 dated 9 November 2021

The previously revised ACHA (V3) was not sent out to stakeholders for Stage 4 consultation as there was no material change to the impact assessment or recommendations (i.e., the impacts to Aboriginal heritage did not increase). The current version of the ACHA (V4), which notably includes clarifications regarding the location and nature of the proposed development in relation to known Aboriginal heritage constraints, will be sent to Aboriginal stakeholders with a timeframe of 28 days for review and comment as per the Consultation Requirements.

4 BACKGROUND INFORMATION

The following section discusses the study area in relation to its Aboriginal cultural values.

4.1 ETHNOHISTORY

An increase in archaeological studies focused on the Shoalhaven region over the last 2 decades has cast a new light on previously held views on Aboriginal population size and land use. The limited ethnographic accounts of early settlers were once considered the primary source for archaeological enquiry. Population estimations at the time of contact are notoriously problematic as Aboriginal groups avoided the early settlers and were highly mobile. Another factor that complicates an accurate estimation is the effect of European diseases such as influenza and smallpox, which decimated Aboriginal populations soon after contact.

Tindale identified the Dharawal-speaking Wodi Wodi group as the Aboriginal custodians of the Nowra area (Tindale 1974, p.156). The range of the Dharawal speakers is described as the country from Botany Bay in the north and Campbelltown in the west, south through the Nepean, Wollondilly, Georges River and Cataract River water catchments down to the Shoalhaven River and Jervis Bay. Alternatively, Dharawal land has also been described as spreading from Sydney in the north, the Blue Mountains and Goulburn in the west, and as far south as Bega (Department of Environment and Conservation 2005b, p.6), Organ & Speechley 1997). Dharawal people are often sub-divided into several smaller categories referred to as fresh water, bitter water or salt water people depending on whether they occupied the coastal regions, the swamps or the plateaus and inland river valleys (Department of Environment and Conservation 2005b, p.6).

Neighbouring Aboriginal groups included the Gundungurra, Darug, Dhurga, Awabakal and Wiradjuri people, and movement in neighbouring territories was permissible under certain circumstances. A close connection existed between the Nowra Dharawal speakers and the Gameygal Dharawal speakers who traded together, shared ceremonies, and intermarried (Department of Environment and Conservation 2005b). During the 1800s, Aboriginal people, including Nowra Dharawal speakers, were known to have moved from the Shoalhaven River down to Jervis Bay, for both food gathering and inter-tribal activities (Organ 1990); (Sefton 1981, p.15).

The pre-contact population numbers for the Shoalhaven region are not known and, due to smallpox epidemics preceding European explorers to the region, it is unlikely that early European settlers were able to successfully grasp the traditional population size. The Shoalhaven region was a very densely populated area with between 2 to 4 people present per kilometre^2 (Organ & Speechley 1997, p.1). It has been estimated that in 1825 there were 1,800 Aboriginal people in the Shoalhaven area, spread as far south as Batemans Bay.

After land grants were issued to settlers in the Shoalhaven region in the early 1820s, Aboriginal food supplies were destroyed and land use was forever altered through the introduction of European livestock, exotic plants and crops, tree-felling, hunting, the fencing off of lands and the enforcement of European rules about “trespassing” (Organ & Speechley 1997, p.11). From the 1850s onwards, reports indicate that Aboriginal camping and hunting became concentrated along the coast as a result of being pushed to the fringes of their own country by European settlement and farming (Department of Environment and Conservation 2005b, p.25). There was no record of large-scale armed resistance from the Aboriginal people of the Nowra area against the European settlers, but small-scale resistance including homicide, intimidation and the sabotage of European farms that took place in an attempt to drive off the Europeans. Further thefts occurred in attempts to obtain food once traditional hunting and plant collecting practices had been disrupted by farming (Department of Environment and Conservation 2005b, p.18).

Pressure from the environmental and social impacts of European settlement led to conflict between Aboriginal groups in the Shoalhaven region. Furthermore, as vacant land disappeared, forced interaction between European settlers and Aboriginal people become more frequent, resulting in campsites being established near established European settlements with a variety of responses from the residents. The Osborne family, who settled in Marshall Mount in 1831, showed kindness to the Aboriginal people who camped opposite the old village school and provided supplies of meat

and fruit each Christmas (AMBS Consulting 2006, p.38) Biosis Pty Ltd 2010, p.45, Kass 2010, p.13).

4.2 PHYSICAL SETTING

The physical setting of the study area would have provided an ideal location for traditional Aboriginal occupation. Situated in the Shoalhaven River Catchment area, the study area has Bomaderry creek on two sides. This location would have provided direct access to a number of exploitable resources suitable for long-term occupation. Activities such as fishing, tool manufacture, hunting, and social gathering are likely to have occurred within the boundary of the present study area. A closed forest towards the southern side of the study area is present and this would have likely been the natural setting of the study area (Figure 4.1).



Figure 4.1 Southern side of the study area

4.3 DESCRIPTION OF ABORIGINAL CULTURAL HERITAGE VALUES

It is generally accepted that Aboriginal people have inhabited the Australian continent for at least 65,000 years, and NSW for over 42,000 years (Clarkson et al 2015, Bowler et al. 2003). Aboriginal culture is rich and involves custom, lore and a values system based upon the sustainability of their spiritual connection, belonging, obligation and responsibility to care for their land, people and environment (DECCW 2010d). Aboriginal cultural knowledge can be defined as:

> *"… accumulated knowledge which encompasses spiritual relationships, relationships with the natural environment and the sustainable use of natural resources, and relationships between people, which are reflected in language, narratives, social organisation, values, beliefs, and cultural laws and customs…"* (Andrews et al. 2006)

Aboriginal cultural heritage encompasses both tangible and intangible elements (DECCW 2010b, p.3). Tangible heritage may include:

- Items and places made and used by Aboriginal people such as stone tools, art sites and ceremonial or burial grounds.
- Contemporary and/or historical sites such as old mission buildings, massacre sites and cemeteries.
- Cultural landscapes which are "*a place or area valued by an Aboriginal group (or groups) because of their long and complex relationship with that land*" (Buggey 1999).

Aboriginal cultural heritage is not just confined to tangible sites and landscapes, but also includes intangible aspects such as peoples' memories, story-lines, dreaming stories, ceremonies, language and other cultural knowledge passed from generation to generation (DECCW 2010b, p.3).

4.4 MATERIAL EVIDENCE OF ABORIGINAL LAND-USE

The material evidence of Aboriginal land-use has been compiled based upon a review of previous archaeological studies at a regional and local level, heritage database searches and field investigations.

REGIONAL ARCHAEOLOGICAL CONTEXT

Many of the earliest archaeological models were either developed for the entirety of the southern New South Wales coastline.

One of the early models of coastal occupation was developed by Lampert (Lampert 1971). He proposed a three-phase technological sequence for south-eastern Australia.

- A pre-Bondian phase from at least 12000 BP to 6000 BP, consisting of a mixture of amorphous stone scrapers, a few pebble tools and saw edged flakes.
- A Bondian phase from 6000 BP to 1000 BP containing the same tools from the previous phase with the addition of backed blades and Bondi points
- A post-Bondian phase where backed blades disappeared, Eloureras and fabricators were introduced and pre-Bondian technology was retained.

Lampert divided known sites into three groups on the basis of resource exploitation:

- Sites such as Durras, Wollumboola and Wattamolla on the foreshore and beach containing the remains of coastal resources such as fish, shellfish, marine birds and seals, with evidence of specialised technology.
- The Bomaderry Creek site in the Shoalhaven estuary containing only the remains of terrestrial resources despite being near the coast.
- Sites such as Currarong, Burril Lake and Curracurrang, next to creeks or estuaries containing the remains of both coastal and terrestrial resources.

Lampert's review concentrates on coastal sites and indicates that the inhabitants of this area, particularly in the last 6000 years since the sea level stabilised, operated a diverse economy utilising marine, riverine and terrestrial resources.

Sefton (1981) created a large-scale archaeological predictive model for the entire Illawarra and Shoalhaven region. Geographic areas within the model included the catchment areas of Port Hacking, Wingecarribee, Wollondilly and Nattai Rivers, northern Illawarra escarpment, Bass Point, Kangaroo Valley, Nowra and the lower reaches of the Shoalhaven River, Jervis bay, McDonald State Forest, the upper reaches of the Clyde River and Murramarang Aboriginal Area (Sefton 1980)

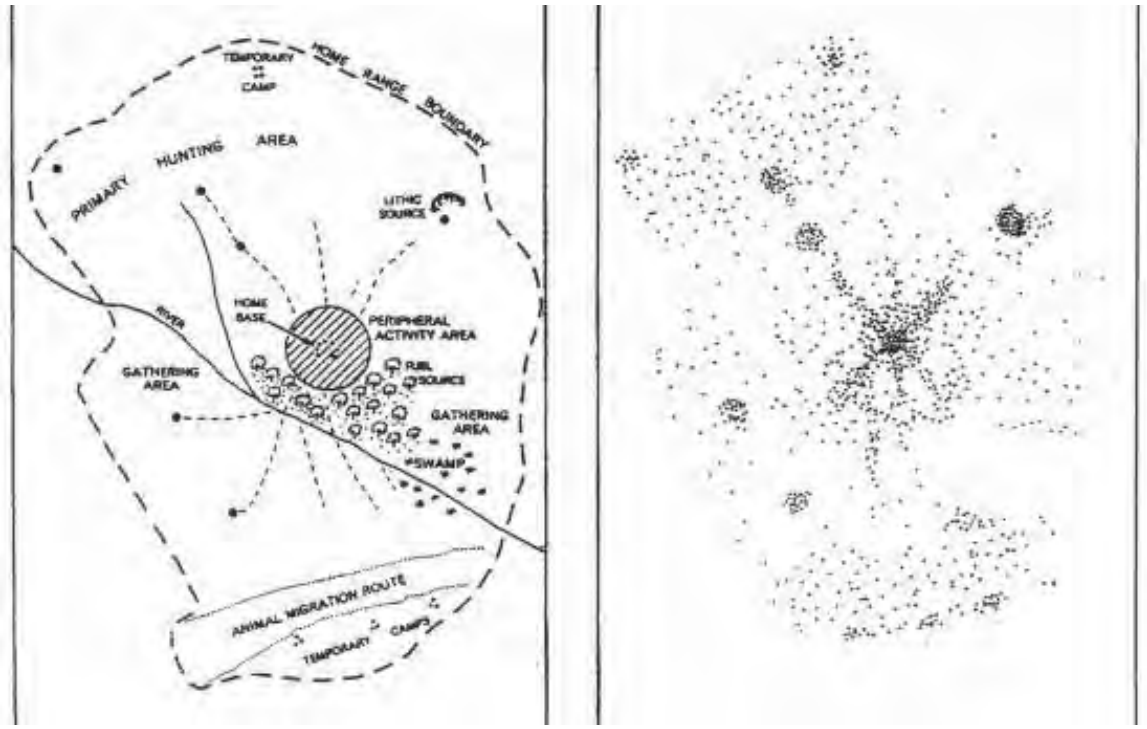
The site types were compared with landscape potential and the following conclusions were reached:

- The zone from the coast to the upper reach of estuaries has potential for middens, archaeological deposits, surface campsites and burials.
- Flat surfaces and overhangs where Hawkesbury sandstone, Shoalhaven group sandstone and conglomerates outcrop and/or overlay either softer siltstones or shales were identified as having potential for engravings, axe grinding grooves, water channels, shelters with the archaeological deposit, art sites, surface campsites and stone arrangements.
- Alluvial plains and the well-drained hill slopes alongside them had the potential for scarred trees, open sites, shelter sites and shelters with art.
- Areas of stone outcrops or exposures suitable for use in making stone tools may contain quarries and other archaeological sites.

- Prominent natural features of the landscape such as high mountain peaks, rock outcrops and lakes may also be culturally significant as natural sacred sites; such areas may not necessarily have associated archaeological deposit (Sefton 1981, pp.29–31).

Foley (1981) developed a general site distribution model for forager settlement patterns. The model splits hunter gatherer sites into two main categories; 'residential base camps' and 'activities areas' People reside in one general location or locations, probably in proximity to a good source of permanent water with shelter from the elements, and travel throughout the local landscape to gather resources at known locations. The right-hand side of Figure 4.2 shows how this settlement pattern would look in terms of artefact discard. The majority of artefacts are deposited in proximity to the residential base camp, fewer at the various resource locations and a generally low, random scatter amount throughout the rest of the landscape, mainly on travelling routes between activity areas and the base camp. The model, however, does not take into account the use of more than one base camp in an area, or changing preferences of camping areas over time; nor does it account for the movement of resources over time (Foley 1981).

Figure 4.2 Foraging Model (Foley 1981)



Creek terrace McDonald developed a predictive model based on stream orders. While developed by McDonald during her work on the Cumberland Plain, stream order modelling has been adapted and implemented as a modelling methodology for the entire eastern seaboard of Australia. The basis of stream order modelling is that it can be used to anticipate the potential for Aboriginal camp site locations to be present in the landscape based on the order of water permanence. McDonald (1997a, 1997b, 1999 & 2000) in particular has drawn on stream order modelling in order to forecast the potential nature and complexity of sites. These models can also be used to predict site distribution, the possible range of activities carried out at a particular site and the frequency and/or duration of occupation. Analysing stream order can allow researchers to locate areas of past water permanence, which would have been vital for Aboriginal people. Abundant food and other resources are more likely to occur in areas of water permanence which would, in turn, attract Aboriginal occupation. McDonald's excavations of open artefact scatter sites at the ADI site in St Marys provided evidence of such a correlation (McDonald 1997). Based on the result, an observation was made that, artefact scatters in the vicinity of a higher order ranking stream reflect a greater range of activities (e.g., tool use, manufacture and maintenance, food processing and quarrying) than those located on lower order streams. Temporary or casual occupations of a site, reflected by an isolated knapping floor or tool discard, are more likely to occur on smaller, more

temporary water courses (McDonald 1997). It is, therefore, possible, McDonald concluded, that stream order modelling could be utilised to make general predictions about the location and nature of Aboriginal sites on the Cumberland Plain, while also providing general guidelines which can be transposed throughout New South Wales.

In 2000, Navin Officer Heritage Consultants prepared a predictive model for sites location within the boundaries of Shellharbour City Council, which can be adapted for use in the current study area. As a result of a heritage study, Navin Officer identified the following predictive model rules (Navin Officer Heritage Consultants 2000, pp.51–52):

- Sites can occur in all types of landscapes as long as the necessary requirements are present of well-drained, relatively level ground without rock outcrops, views of surrounding areas and proximity to fresh water sources.
- Sites increase in frequency along the boundaries of differing eco-zones.
- Stone artefacts, either isolated or recorded as a scatter, are the most common site type.
- Ridgelines and spurs offer movement pathways through the landscape and generally contain larger and more significant sites.

Boot (2002) formulated a model for occupation patterns in the South Coast hinterland. He argues that small groups of people travelling in the hinterland are likely to have exploited resources from the immediate surrounds of a site and rarely exported these resources elsewhere, while larger groups would have congregated where abundant short-term resources occurred and would have engaged in export and trade of local resources. Therefore, greater intensity of occupation would have occurred in regions of greater biodiversity (Boot 2002, pp.317–319).

In 2006 Clarke and Kuskie (2006) developed a predictive model of the Shoalhaven region in general. They suggested that the region could be divided into two main resource zones, each supporting a different range of occupation types (Clarke & Kuskie 2006). These zones were called Primary and Secondary zones, and were defined by terrain units (landforms) as follows:

- Primary resource zones occur in close proximity to the Shoalhaven and Crookhaven Rivers and have a higher probability of containing evidence for a wide range of occupation types including congregations of large groups of people, community base camps, nuclear/extended family base camps, camping by small hunting and/or gathering (without camping) and transitory movement. Occupation is likely to have been regular and potentially longer in duration in the primary zones.
- Secondary resource zones are located in close proximity to higher order creeks and/or wetlands, including Bomaderry, Mundamia, Calymea, Flat Rock, Bengalee and Sandy Creeks and their associated flats, slopes and terraces. Occupation is likely to have been sporadic and relatively short in duration.

The current study area passes through areas that correspond to both primary and secondary resource zones. It contains areas adjacent to the Shoalhaven River and also contains areas adjacent to Bomaderry Creek.

Although other consultants have undertaken more recent work around the Shoalhaven area, these reports either contain predictive models which are similar in nature to those listed above or are too recent to be obtained from the AHIMS database.

LOCAL ARCHAEOLOGICAL CONTEXT

Although European observers recorded various aspects of the lifestyles of Aboriginal people in the Shoalhaven from the early years of European settlement of the area in the late 18th century, it was not until the 20th century that archaeological investigations of Aboriginal archaeological sites were undertaken.

Since then, archaeological sites have been frequently recorded across the region, and hundreds have been excavated. Most commonly, these contain open scatters of archaeological material such as stone artefacts, engraved or pigmented images or midden material. Much of the archaeological work in the local area has been undertaken as a result of development-driven archaeological studies or surveys. Table 4-1 below outlines the details and results of some relevant archaeological consultant's reports from the region. Please note that this is not a complete list.

Table 4-1 Summary of relevant regional reports

Reference	Study area location/ description	Results	Site distribution/ Conclusions
Artefact Heritage Pty Ltd 2018	• ACHA for the proposed construction of a new bridge on the Princes Highway over the Shoalhaven River at Nowra. A test excavation program was conducted as part of the assessment. • Situated 3km south of the study area. • Entire study area was divided into 6 survey units. • Landforms identified included flat, slope, hilltop, cliff top, cliff face, embankment.	5 sites identified, including Nowra Bridge 6 (# 52-5-0872), Nowra Bridge 7 (# 52-5-0875), Nowra Bridge 8 (# 52-5-0876), Nowra Bridge 9 (# 52-5-0874) and Nowra Bridge 10 (# 52-5-0873). An archaeological survey was also conducted during the project due to changes in the development. One new Aboriginal site was identified (Nowra Bridge 11 (#52-5-0878).	• 5 PADs were identified, and test excavated. 2 PADs were identified on flat and hilltop landforms respectively, 1 PAD within the slope landform and 2 PADs within the cliff face and cliff top landforms. • The test excavations identified 4 low density artefact scatters and one habitation site. • Nowra Bridge PAD 1 (AHIMS 52-5-0859) had human teeth from one of the test pits.
Navin Officer Heritage Consultants 2012	• Archaeological survey and test excavation within the anticipated construction 'footprint' of the 11.6 kilometres upgrade to the Princes Highway between Toolijooa Road north of Foxground and Schofields Lane south of Berry in New South Wales (NSW). • Situated 12km northeast of the study area.	• The survey identified 29 Aboriginal heritage items within the project area, including two lithic artefacts, 23 potentially archaeological sensitive areas (PADS) and four historical recordings of places of Aboriginal cultural significance. • 21 PADs were selected for testing. • Test excavation resulted in 18 out of the 21 PADS yielding 236 stone artefacts.	• 236 artefacts were obtained from 298 test pits excavated in 21 PADs. • 7 stone materials were identified. • Assemblage was dominated by flakes (58%) and flaked pieces (19.1%). • Artefacts mostly found in locally elevated micro-topographies within a 200-metre margin around former wetland basins, such as low gradient basal slopes and the crests of low spurs. • Lower lying alluvial flats in valley floors have low archaeological sensitivity.
Navin Officer Heritage	• An assessment of the environmental impacts	• 12 Aboriginal Sites within or near the	• 12 Aboriginal sites were found in or

Reference	Study area location/ description	Results	Site distribution/ Conclusions
Consultants 2010	on the cultural and archaeological heritage of the projected upgrade to the Princes Highway between Mount Pleasant and Toolijooa Road in NSW. • 21km northeast of the study area.	survey area with sub-surface and surface artefacts as well as PADS. • Low to very low artefact densities. In addition, five mature fig trees were deemed to hold Aboriginal cultural significance. • The test excavation sites were located on elevated topographies adjacent to major creek lines, as well as in or near riparian corridors and major ridge crest.	within the study area with low to very low artefact densities.
Kelleher Nightingale Consulting Pty Ltd 2010	• Archaeological assessment completed for the proposed North Nowra Link Road. • 4.3km south of the study area.	• 28 Aboriginal sites, which included four artefact scatters, two isolated finds, one midden site, one grinding groove site and 20 rock shelter sites along the Bomaderry Creek Regional Park.	• It was concluded that the study area had a high density of Aboriginal material and that the surrounding area was occupied to a high degree by previous Aboriginal populations. • Most sites were in disturbed context and assessed to have low archaeological significance.
Kuskie 2008	• Aboriginal Heritage Impact Assessment for a proposed Ethanol Plant Upgrade at Shoalhaven Starches, NSW. • 3.4km southeast of the study area.	• The assessment found that there was low potential for Aboriginal heritage objects in due to the type of landform, i.e., low lying coastal plains.	No Aboriginal heritage evidence or cultural values were identified within the study or during the investigation.
Navin Officer Heritage Consultants 2006	• Test excavation program for the Gerroa Sand Mine extension. • The testing included using a mechanically driven auger and included 51 test pits.	• A total of 39 artefacts were recovered from five of the test pits, and shell midden was recovered from 26 of the test pits.	• The artefacts were widely distributed across the site • It was concluded that the site represented low-

Reference	Study area location/ description	Results	Site distribution/ Conclusions
	• 23 km east of the study area.	• The recovered assemblage was dominated by complete and broken flakes, with other artefact types being rare. • Raw material comprised mostly silcrete, quartz and chert, with sandstone, chalcedony and volcanic materials also present. • Coastal Plains and sand dune landforms.	density background scatters.
Silcox 1990	• Archaeological assessment of Aboriginal and Historic sites within the anticipated Pacific Highway upgrade between Dunmore and North Kiama NSW. • 44km northeast of the study area.	• Four Aboriginal sites featuring artefacts associated with shell middens were found and two potential camp sites. • These results, highlight that midden in estuarine environments are usually located on elevated topographies around estuary margins or on the raised surfaces of older sediment deposition above their inundation zones.	• Four Aboriginal sites were identified during the assessment.

Table 4-2 Summary of past reports in close proximity to the study area

Reference	Study area location/ description	Results	Site distribution/ Conclusions
Austral Archaeology Pty Ltd 2019	Aboriginal Cultural Heritage Assessment, including test excavation, at, Lot 116, DP 3060 (adjacent to the study area). 2km west of the study area.	• ACHA identified two artefacts from a total of 35 test pits excavated within the study area. • The two artefacts were recovered from hillcrest landform at a depth of 50mm.	• It was concluded that the study area has a low density, background scatter of low archaeological significance Disturbances were recorded within upper soil profiles

Reference	Study area location/ description	Results	Site distribution/ Conclusions
			within the A1 topsoil as a result of land clearance, cattle grazing and ploughing activities.
Biosis Pty Ltd 2019	• Aboriginal Cultural Heritage Assessment (ACHA) of a residential subdivision at Taylor's Lane (Lot 1 DP949932), Bomaderry. • 1.3km northwest of the study area.	• A survey followed by test excavation did not identify any Aboriginal heritage material within the Moss Vale AFT1 site area.	• The site was recorded on a hillslope landform within 1st order non-perennial drainage line. • The study area has low subsurface archaeological potential. • It concluded that the study area was occupied by the traditional communities for short duration-hunting gathering and transitional movement activities.
Dibden 2018	• Due Diligence Assessment of Moss Vale Road North Urban Release Area Master Plan and Development Control Plan for future residential development. • 600m northwest of the study area.	• Surveyed 16 units or areas assessing for archaeological potential. • Five sites were identified as having moderate archaeological sensitivity, with other sites having low or negligible sensitivity.	• Moderate disturbances were attributed to Ploughing, grazing, building and rod construction, electricity transmission clearing, fencing. • Gentle slope unit was assessed to have negligible to very low archaeological potential. • Creek landform was assessed to have low moderate archaeological potential. • Drainage depression landform adjacent to the Abernethy's Creek was assessed to have negligible archaeological potential.

Reference	Study area location/ description	Results	Site distribution/ Conclusions
			• One previously known archaeological site was identified during the survey.
Biosis Pty Ltd 2018	• Aboriginal Heritage Due Diligence Assessment for Taylors Lane, Lot 116, DP 3060 (adjacent to the study area) for the proposed residential subdivision at 371 Illaroo Road, Bangalee.	Survey identified two areas of moderate archaeological potential, one on a hill crest in the northern section of the study area, and the other on a terrace landform in the south-eastern section of the study area.	No further results
Biosis Pty Ltd 2017	• An assessment for a proposed residential subdivision in Meroo Meadow, approximately 3 kilometres south of the study area.	• Two low density artefact scatters were identified in the test excavation program. • The assessment undertook test excavations of a PAD located on hill crests and slopes located on Albernathy's Creek.	Results were indicative of short term, sporadic Aboriginal utilisation of the area which is consistent with Clarke and Kuskie's (2006) secondary resource zone occupation and predictive models that favour elevated terrain units in close proximity to higher order creeklines.
Navin Officer Heritage Consultants 2013	Completed a series of assessments for the Princes Highway Upgrade between Gerringong and Bomaderry between 2007 and 2013.	• Field survey recorded 18 Aboriginal sites within the study area, including two artefact scatters and 16 Potential Archaeologically Sensitive Areas (PASAs). • Also, a number of Aboriginal cultural heritage values were identified, including two large old growth fig trees, and potential burial sites. • Fourteen of the sixteen PASAs contained Aboriginal artefacts, with a total of 243 artefacts from the excavation program. The majority of artefacts were complete and broken flakes, with	• All of these sites were identified as having low significance within a local context based on the results of the test excavations. • The sites were located near the riparian corridors and some sites were recorded from a major ridge crest landform of Toolijooa Ridge.

Reference	Study area location/ description	Results	Site distribution/ Conclusions
		small numbers of cores also present.	
Kayandel Archaeological Services 2011	• Aboriginal heritage assessment for the Shoalhaven Starches Gas Pipeline Scheme to the north of the study area. • 3km south of the study area.	• Relocation of site Wollingurry Creek 1 containing 13 artefacts. • Previously recorded sites Wollinggurry Creek 2 and 3 were not able to be relocated.	• No new Aboriginal heritage sites were recorded. • Land use patterns were concluded to be of high impact on the Aboriginal heritage. • Low lying flood plains were considered as having no potential for Aboriginal occupation.
Lampert & Steele 1993	• Lampert and Steele undertook two independent research excavations at Bomaderry Creek rockshelter.	• Tests squares determined that deposits were shallow. • Prehistoric occupation evidence was found such as flaked stone and fire blackened macropod bones. • Chert and reef quartz were also found around the site.	• Aboriginal hunter-gatherers briefly lived in the Bomaderry creek area at approximately 1900 years BP and 1400BP. • The people occupying the rock shelters were largely dependent on the immediate surrounding resources available from the tidal estuary of the Shoalhaven River than the ocean resources.
Navin Officer Heritage Consultants Pty Ltd 1992	• Archaeological survey on the northern side of the Shoalhaven River, near Big Island. • 3kms southeast of the study area.	• Two isolated finds were identified, including a ground edge hatchet (APPM Isolated Find 1 #52-5-288 and #52-5-289) and a broken alluvial pebble (APPM Isolated Find 2 #52-5-290).	• The two artefacts were found in a wall of an artificial drainage channel, and it was concluded that they were not *in-situ*.
Navin 1991	• Navin was commissioned by Mitchell McCotter and Associates Pty Ltd to conduct an archaeological and environmental survey to evaluate a potential second option for a road	• Completing desktop research, Navin identified archaeological sites that range from rock shelters and art to burials close to Nowra, however; found that no sites	• Two sites were identified close to Bomaderry Creek. • Rockshelters were located on the southern bank of Bomaderry Creek.

Reference	Study area location/ description	Results	Site distribution/ Conclusions
	alignment and bridge development. • Situated between 1km to 400m south of the study area,	were identified at the proposed site. • Navin conducted a survey by walking the length of the proposed development and located two rockshelter sites; a shelter with three artefacts close to Bomaderry Creek and a shelter with four artefacts. • No Aboriginal consultation was used during this survey. • It was concluded that there were no archaeological constraints to the development.	

HERITAGE DATABASE SEARCH

An extensive search of the AHIMS database was conducted on 5 February 2020 (Client service ID:481699). A copy of the full results of this search is available in Appendix A of the Aboriginal Archaeological Technical Report (Appendix 8). The search identified 113 Aboriginal archaeological sites within a 5-kilometre x 5-kilometre search area, centred on the study area (Table 4-3). None of these registered sites were found to be located within the study area (Figure 4.3). Three were located within proximity to the study area, including three artefact scatters (AHIMS #52-5-0545, AHIMS #52-5-0546, AHIMS #52-5-0547) and a grinding groove site (AHIMS #52-2-1797).

To ensure the AHIMS information contained within this report remains valid during the DA application process, an updated AHIMS search was completed on 18 November 2021 for the following area covering the study area: Datum: GDA, Zone: 56, Eastings: 275528.0 - 282951.0, Northings: 6138576.0 - 6145416.0 with a Buffer of 0 meters (Client Service ID: 639691). A copy of the updated search is provided in Appendix A of the Aboriginal Archaeological Technical Report along with the original search results. The updated AHIMS search data was inspected, and it was confirmed that since the original search was conducted no new Aboriginal heritage sites exist within or directly adjacent to the study area (other than the site/s uploaded as a result of the assessment completed for this project).

Table 4-3 Analysis of AHIMS site features

Site type	Occurrence	Frequency (%)
Artefact	53	46.90
Potential Archaeological Deposit (PAD)	18	15.93
Artefact-PAD	12	10.62
Artefact-Open Camp Site	6	5.31
Art (Pigment or Engraved)	3	2.65
Artefact-Shelter with Deposit	3	2.65
Habitation Structure	3	2.65

Site type	Occurrence	Frequency (%)
Modified Tree (Carved or Scarred)	2	1.77
Art (Pigment or Engraved): Artefact Shelter with Art, Shelter with Deposit	2	1.77
Art (Pigment or Engraved): Artefact: PAD	2	1.77
Artefact: Shelter with Deposit	2	1.77
Grinding Groove: Axe Grinding Groove	2	1.77
Art (Pigment or Engraved): Shelter with Art	1	0.88
Artefact Grinding Groove: Shelter with Deposit	1	0.88
Grinding Groove: Habitation Structure	1	0.88
Artefact: Habitation Structure	1	0.88
Artefact: Habitation Structure-Grinding Groove	1	0.88
Total	113	100

Table 4-3 shows there are 17 different site types in the search results. The most common of these was artefact with 46.9% (n=53) followed by PADs with 15.93% (n=18) and artefact/PAD with 10.62% (n=12) being the next most common. The remaining site types are of small frequencies with artefact/open camp site at 5.31% (n=6) being the most frequent and the remiander less than 3%.

There are four AHIMS sites located close to the study area which include two artefact scatters (BCRP 013 West Cambewarra AHIMS #52-5-0545, BCRP 014 West Cambewarra AHIMS #52-5-0546), an isolated artefact (BCRP 015 West Cambewarra AHIMS #52-5-0547) and a partially destroyed grinding groove (West Cambewarra Rd.; Bomaderry Creek AHIMS #52-2-1797). Table 4-4 provides a summary of sites recorded near the study area.

Table 4-4 Summary of sites recorded within the study area and adjacent

Name	AHIMS #	Type	Landform	Location	Potential to extend into study area
BCRP 013 West Cambewarra /	52-5-0545	Artefact scatter site. 2 fine-grained flaked pieces and 5 shell pieces.	Hillslope and located on walking track	Located 159 m south-west of the study area, Bomaderry Creek Reserve	LOW. Only 2 artefacts, suggestive of broad background scatter
BCRP 014 West Cambewarra/	52-5-0546	20 artefacts were recovered which included fine grained red and grey silcrete and a pale white fine-	Creek Terrace and disturbed by creek erosion and bike trail.	Located 18 m west of the study area, Bomaderry Creek Reserve.	LOW. Bombaderry Creek forms a natural boundary for the definition of the eastern margin of this site. But highly indicative of material occurring on the eastern side of the

Name	AHIMS #	Type	Landform	Location	Potential to extend into study area
		grained material.			creek in the current study area
BCRP 015 West Cambewarra	52-5-0547	Isolated artefact. One core was recovered from the site.	Hillslope and site disturbed by foot tracks and wind/water erosion,	Located 30 m south of the study area, Bomaderry Creek Reserve	LOW. Site is an isolated artefact. But indicative of potential for further isolated artefacts or low-density scatter
West Cambewarra Road, Bomaderry Creek	52-2-1797	Grinding Groove	Hill slope.	Located 140 m south of the study area, Bomaderry creek bushland.	LOW. This site will not extend into the study area but shows potential for grinding grooves to occur where sandstone is exposed.

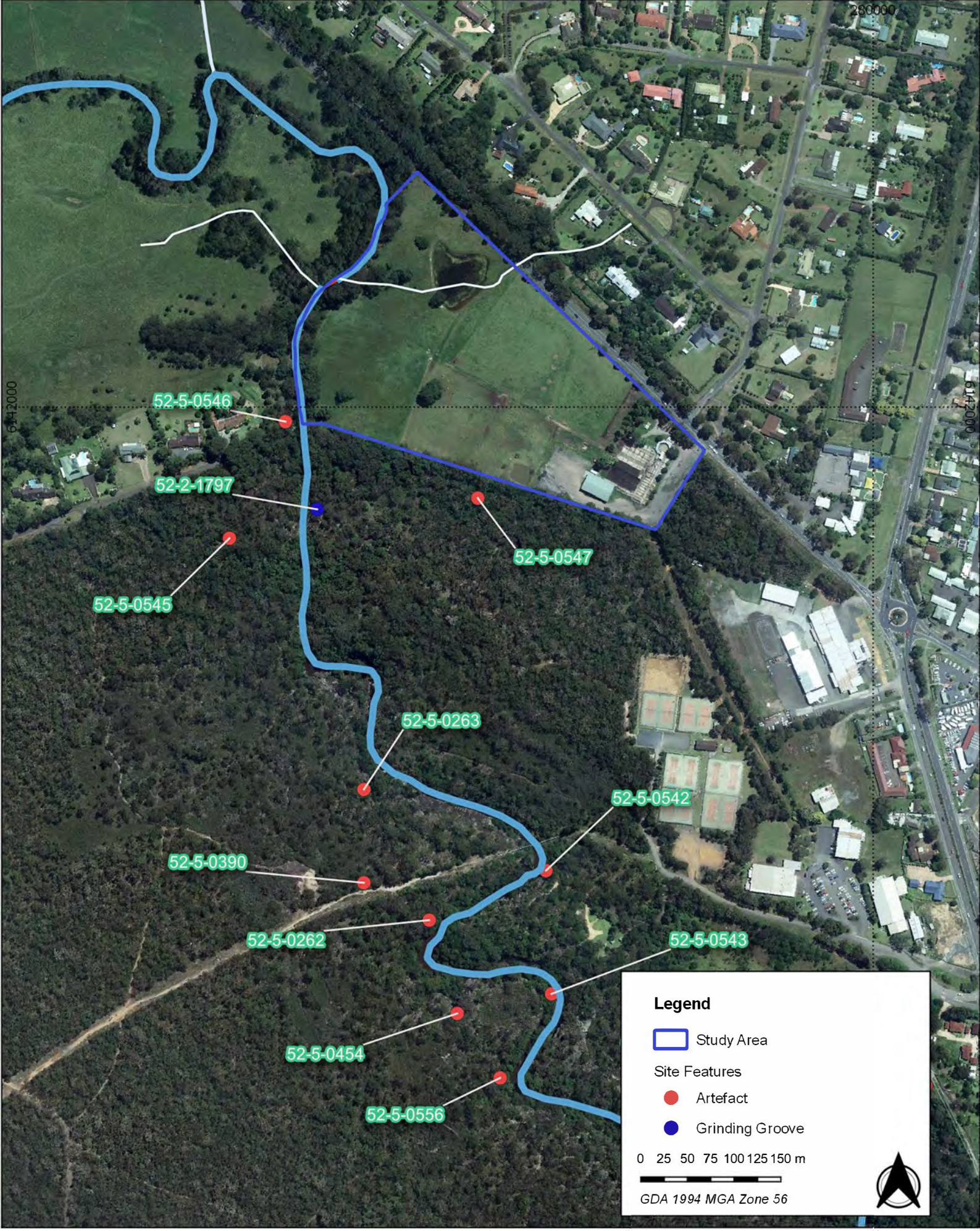


Figure 4.3Identified AHIMS in relation to the study area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Cultural Heritage Assessment Report

Source: NSW DFSI Aerial; NSW DCDB *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

4.4.1 PREDICTIVE STATEMENTS

In general, an archaeological predictive statement for any study area draws on surrounding environmental data, previous archaeological research and predictive models for Aboriginal occupation. Another essential aspect to predicting the archaeological integrity of a site and something that must be considered is previous land uses of the study area and degree of disturbance.

In summary, the main trends broadly seen across eastern NSW are that:

- Archaeological sites occur a wide variety of landforms.
- Site frequency and density are dependent on their location in the landscape.
- There is a dominance of low-density surface open artefact scatters and isolated finds.
- Artefact scatters are commonly located in close proximity to permanent water sources along creek banks, alluvial flats and low slopes, largely concentrated within the first 100 metres of a creek line. More complex sites are usually located close to water sources with major confluences being key locations for occupation sites. Raised, level areas in proximity to water sources are particularly sensitive.
- Archaeological material is also present beyond the immediate creek surrounds in decreasing density with distance from water.
- There may be concentrations of sites occurring on ridge tops and crests that are associated with pathways through the landscape.
- Subsurface archaeological deposits are often found in areas where no visible surface archaeological remains are evident.
- The dominant raw material used in artefact manufacture is silcrete and fine grained silicious material with smaller quantities of chert, quartz and volcanic stone.
- Artefact assemblages usually comprise a small proportion of formal tool types with most assemblages dominated by flakes and debitage.
- While surface artefact scatters may indicate the presence of subsurface archaeological deposits, surface artefact distribution and density may not accurately reflect those of subsurface archaeological deposits.
- Aboriginal scarred trees may be present in areas where remnant old growth vegetation exists.

While these statements provide an adaptable framework for applying a predictive model to the study area, based on the previous models it is possible to further expound on the generalisations made above. The general studies of the Shoalhaven region, the specific investigations surrounding the study area and the search of the AHIMS database have helped to predict what certain site types can be expected within the study area.

The study area contains landforms that have been shown to contain Aboriginal objects in other nearby areas. Simple slopes with a low gradient and proximity to a reliable source of water (Bomaderry Creek and Shoalhaven River) indicate moderate to high potential for the presence of Aboriginal heritage sites such as artefact scatters or isolated artefacts. The southwestern to western extents of the study area have higher potential. Sites that may be present within the study area are:

- Surface open camp sites or isolated finds of flaked or ground stone are likely to occur.
- Grinding grooves have the potential to be present as suitable underlying geological conditions occur, as evidenced by the occurrence of site 52-2-1797 to the south. Nonetheless, actual occurrence is unlikely either through lack of exposed surfaces, or burial of those surfaces through sediment movement. area.
- Potential Archaeological Deposits (PADs) have been previously recorded in the region
- Cacross a wide range of landforms. PADs are likely to be present within areas that are in close vicinity to a water source or on high points.
- Scarred trees are unlikely to be present, as areas of old-growth native vegetation are not present in the study area. While sparse shell pieces have been found in limited prior

studies, there is no suggestion these occurrences have a cultural origin. The location of the study area is not conducive to the occurrence of middens. field methods

A site specific investigation methodology has been developed for the project that complies with the requirements of the Code of Practice (DECCW 2010a).

4.5 SURVEY METHODOLOGY

A visual inspection of the study area was undertaken on 20 February 2020 by Neil Fenley (Senior Archaeologist, Austral). The visual inspection consisted of a systematic survey of the study area to identify and record any Aboriginal archaeological sites visible on the surface, or areas of Aboriginal archaeological potential and cultural sensitivity. The archaeological survey was conducted on foot. The methods used during the visual inspection conformed to the Code (DECCW 2010e).

SURVEY OBJECTIVES

The objectives of the survey were to:

- Complete a systematic survey that targets areas that have been identified as having the potential to contain Aboriginal heritage values.
- Identify and record Aboriginal archaeological sites visible on the ground surface and areas of PAD.

SAMPLING STRATEGY

The survey methodology was designed to optimise the investigation of areas where archaeological materials may be present and visible, as well as investigation of the broader archaeological potential of all landform elements present within the study area, which included:

- Hill slope
- Gentle Slope (Mid-slope)
- Creek terrace

The specific survey methodology developed for this assessment was guided by the survey requirements as set out in Requirement 5 to 10 of the Code of Practice (DECCW 2010a) and based upon consideration of the overall landform pattern within the study area, known landform elements (after Speight 2009) and the location of the previously identified sites. The survey targeted portions of the study area which reflected previous research.

SURVEY METHODS

The archaeological survey consisted of pedestrian transects walked in a generally east-west orientation. The two key factors in any archaeological survey are ground visibility and exposure. Ground visibility is measured by the estimation of ground surface area which is not covered by any vegetation, and exposure is defined by the areas where surface soils and vegetative matter afford a clear assessment of the ground. These two factors were the key target of survey assessment undertaken across the study area within each landform element. Overall survey coverage and calculated survey effectiveness were recorded. Any disturbances across the study area were recorded.

Photographs were taken of all survey units and landforms as well as representative surface visibility, surface exposures, soil profiles and disturbances relevant to the interpretation of the stratigraphic conditions and archaeological potential within each survey unit.

4.6 TEST EXCAVATION METHODOLOGY

4.6.1 TEST EXCAVATION OBJECTIVES

The objectives of the test excavation were to characterise the nature, extent and archaeological significance of Aboriginal objects associated with the two areas (gentle slope and creek terrace) identified as areas of moderate potential within the study area. The third landform of hilltop was assessed to have undergone a high degree of disturbance from the construction of cattle yards, sheds and roads/parking.

4.6.2 TEST EXCAVATION METHODOLOGY

The test excavation program was undertaken according to the prescribed methodology of Requirement 14 to 20 and 23 to 26 of the Code of Practice (DECCW 2010a). Specifically, Requirement 15b of the Code of Practice, stipulates that a sampling strategy must be developed for all test excavations which take place prior to work commencing (DECCW 2010a, p.25). It is a requirement that test pits must be placed on a systematic grid designed to target both areas likely to contain PADs and the location of proposed impacts. Test pits must be located a minimum of 5 metres apart.

Each test pit was excavated following Requirement 16a of the Code of Practice using mattocks, shovels and trowels (DECCW 2010a, p.26). Test excavation pits measured 500 millimetres by 500 millimetres, with the first test pit excavated in 50-millimetre spits to act as a geomorphologic example and the remaining test pits were excavated in 100-millimetre spits. The excavation was undertaken until the B-horizon was reached and then continued for another 100 millimetres to confirm that the following spit was culturally sterile. In general, the decision to stop excavating was made at the top of the C horizon; when a higher percentage of clay was evident, or coffee rock was encountered.

The test pits were generally placed at 20 metre intervals along predetermined transects and they were numbered at the time of sampling design (Test pits 1-21). This numbering was followed in the field, with additional test pits numbered sequentially at the time of excavation. It was necessary to adjust the locations of some of the test pits in the field to avoid the risk involved in excavating in close proximity to the dam and to avoid thick roots. Where artefact clusters were encountered further test pits were excavated to determine the extent of the scatter. Test pit 10 was extended to a 1 metre x 1 metre test pit with additional quadrants being labelled TP24, 25 and 26, a further two more test pits were excavated at 10 metre intervals to the north and south respectively (TPs 22 and 23). Test pits 1 and 4 were obstructed by shallow rocks – at or above 100 mm in depth - and excavation was moved 1 metre at both of these locations. These test pits were recorded as 1B and 4B respectively.

4.6.3 SIEVING

On site processing of excavated soils and artefact, retrieval was undertaken via a combination of dry sieving through both a 5-millimetre and 3-millimetre nested sieve or solely through a 3-millimetre sieve, dependent on the nature of the material. Artefacts were collected from the sieves and placed in bags according to test pit provenance. Buckets containing material from the same spit were kept together and separate from other spits. All test pits were backfilled with the available material retrieved from the sieving location upon completion of the recording.

4.6.4 RECORDING

Detailed recording of all pits was undertaken, requiring the completion of an excavation recording form for each spit excavated. The form necessitated detailed descriptions of the soil profile, any evidence of disturbance and/or features, as well as depth of excavation and the number of artefacts and inclusions present. For each artefact a separate plastic bag was annotated with the project name, transect number, test pits number, spit number, date and recorder's initials.

Photographic recording occurred at the completion of each pit or when an archaeological feature was uncovered. A photographic record was taken of at least one wall section in each test pit. Together with a section drawing and stratigraphic photogrammetry from each pit, the photographs allowed for a detailed record of the strata present at the site.

4.6.5 ANALYSIS OF EXCAVATED MATERIAL

A lithic analysis was conducted by Pauline Ramsey (Austral). The lithics analysis was aimed at primarily identifying the presence of culturally modified lithic material within the archaeological record, with a secondary goal of identifying material, tool types and any indicators of *in situ* reductions that informs depositional integrity. All of the artefacts recovered were taken to temporary storage at the Austral Archaeology office in Albion Park (NSW) and are to be reburied within the study area. Aboriginal stakeholders are to be consulted as to an appropriate area to relocate these artefacts. A new AHIMS site card for the location where the artefacts are to be relocated is to be created and lodged with the AHIMS registrar.

4.7 ARTEFACT COLLECTION AND STORAGE

Collection of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

Each artefact identified during the subsurface testing was relocated and temporarily stored at Austral's office located at 1/148 Tongarra Road, Albion Park, NSW. After the submission of the final ACHA, the collected Aboriginal material will be taken to a location within or near the study area previously agreed upon by Allen Price and Scarratts and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.

A GPS recording of the location will be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the Heritage NSW AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and Heritage NSW will be consulted over a suitable relocation site. This new site will also require GPS coordinates and all necessary details to be recorded with the Heritage NSW AHIMS.

Figure 4.7 and Figure 4.8 outlines the location of all excavated test pits in the identified landforms within the study area.

Figure 4.4 Landscape view of the hill slope landform facing east



Figure 4.5 Landscape view of the gentle slope landform within the study area



Figure 4.6 Landscape view of the Creek terrace landform facing north



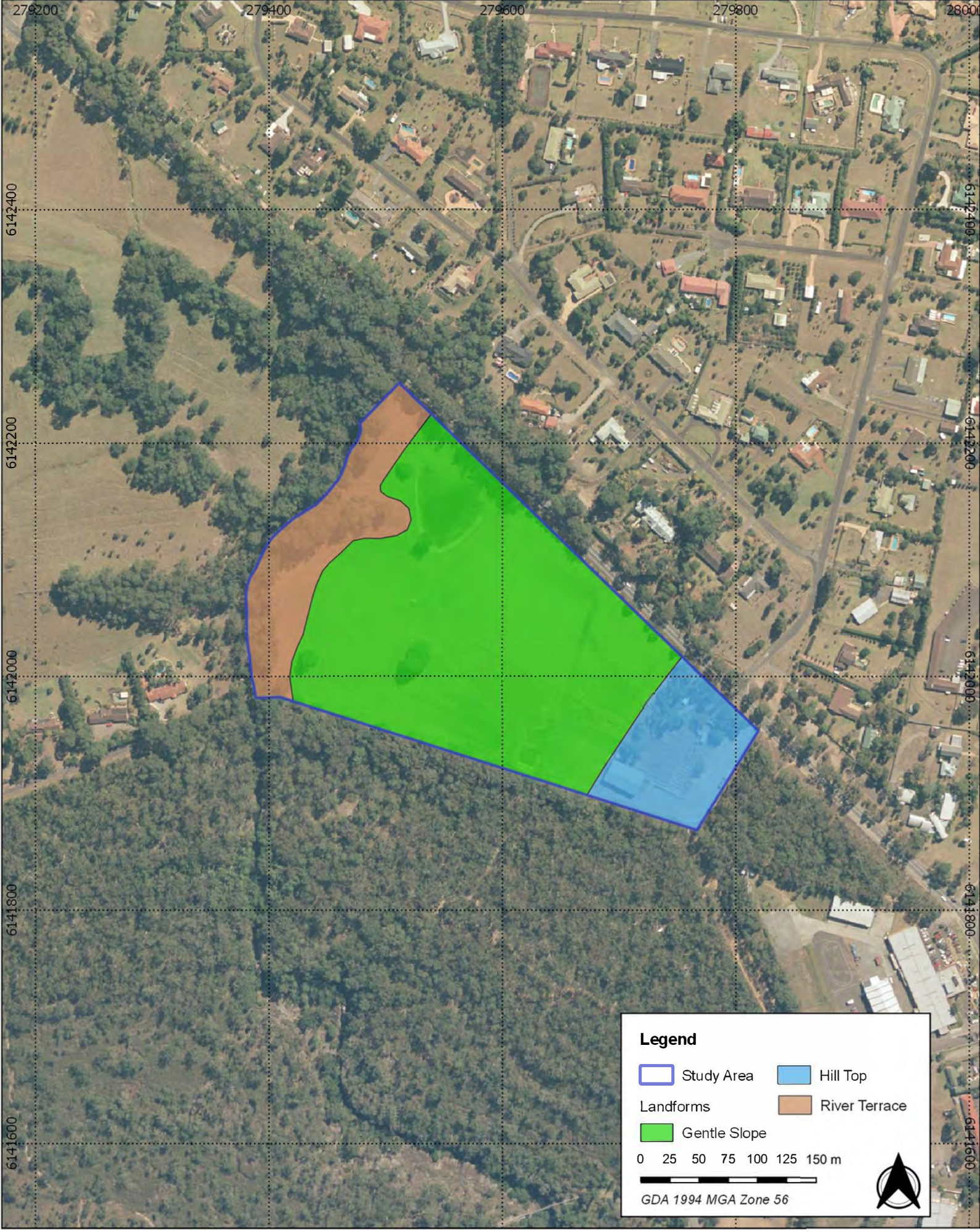


Figure 4.7 - Landforms Evident within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: NSW DFSI Aerial

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY



Figure 4.8 Survey Transect Map

2109 - 25 Moss Vale Road - N27790

Source: NSW LPI Basemap

Drawn by: AH Date: 2021-08-31

AUSTRAL ARCHAEOLOGY

5 ARCHAEOLOGICAL RESULTS

5.1 SURVEY RESULTS

The archaeological survey of the study area was completed with the following conclusions:

- No Aboriginal artefacts or sites were identified in the study area.
- There was very poor surface visibility across the majority of the study area.
- Two landforms - the gentle simple slope and creek terrace were identified as areas of moderate to high archaeological potential.
- The study area has been subjected to moderate to high disturbance from past land use practices. The hill slope was seen as a highly disturbed landform due to the cattle yard's construction and associated infrastructure.
- It was determined that areas of the simple slope and creek terrace should be subject to test excavation to better define the nature of any archaeological material present.
- Figure 4.8 provides a detail of the transects walked over within the study area during the archaeological survey.
- The survey achieved a 0.31% coverage over the study area. **Error! Reference source not found.** shows the details of the archaeological survey conducted in the study area.

Table 5-1 Effective Survey Coverage

Survey Unit	Topo	Distance (m)	Transect Width	Area Examined (m^2)	% of study area	Visibility %	Effective Coverage (m^2)	Effective Coverage (%)
1	Hill top	500	2	1000	1.17	1	10	0.01
2	Gentle Slope	2500	2	5000	5.89	5	250	0.29
3	Creek Terrace	500	2	1000	1.17	1	10	0.01
TOTAL				7000	8.23%		270	0.31%

Further details of the survey across the study area can be seen in Aboriginal Archaeological Technical Report Attached as Appendix 8**.** Figure 4.4, Figure 4.5 and Figure 4.6 show the landscape features of the three identified landforms within the study area.

The effectiveness of archaeological surveys is greatly affected by the ability to see stone artefacts on the ground. Any form of ground cover such as pasture, leaf litter will impede the ability to see artefacts. The subject area had very low surface visibility due to the area being heavily pastured. There were some areas that afforded better surface visibility, such as farm access tracks and eroded areas such as crests of erosion control banks and dam banks. Table 5.1 summarises approximate archaeological visibility and effective coverage of the study area.

Of the ~8.88ha study area Table 5-1 illustrates that 7000m^2 (0.7Ha) was examined and of that ~270m^2 was effectively covered. This represents approximately 0.31% of the study area and is considered low effective coverage.

5.2 TEST EXCAVATION RESULTS

The test excavation was conducted over four days between 18 January to 22 January 2021 and 27 January 2021 by Pauline Ramsey (Archaeologist, Austral) with assistance from representatives from the Traditional Owner group Troy Tungai and Craig Tungai from Tungai Tonghi Aboriginal group. Of the 31 test pits excavated, 20 (64.5%) yielded cultural material. Most test pits with artefacts had low densities, although this was interspersed with higher densities closer to the creek

line in the west. Table 5-2 summarises the distribution of artefacts within the test pits and further summarises the vertical distributions within the soil profiles.

Table 5-2 Artefact distribution for test pits with artefacts

Pit	Spit 1	Spit 2	Spit 3	Spit 4	Spit 5	Spit 6	Unprov.	Total	Artefacts/ m^2
3		1						**1**	**4**
4B			5			2		**7**	**28**
5	3	5	8	2	1			**19**	**76**
6	1	4						**5**	**20**
7		1	4	1				**6**	**24**
***10**	1	6		2	2	1	1	**13**	**38**
***24**		5	1		2			**8**	
***25**			2	1		7		**10**	
***26**		3	1	1		2		**7**	
11		2	1					**3**	**12**
12	1							**1**	**4**
13		2	1			1		**4**	**16**
14			2	1				**3**	**12**
19	1							**1**	**4**
20	1							**1**	**4**
21			2					**2**	**8**
22		5	3					**8**	**32**
27		2	1	1				**4**	**16**
28	1	3	1	3				**8**	**32**
30	2	1						**3**	**12**
Total	**11**	**40**	**32**	**12**	**5**	**13**	**1**	**114**	

* The 'test pits' in shaded rows form one contiguous square metre

Across the study area, the top 300mm of soil profile contained approximately 73% of all artefacts, this proportion increasing to 83% of all artefacts in the top 400 millimetres of soil profile. The band between 100 millimetres and 300 millimetres yielded 63% of all artefacts, The deepest artefacts came from between 500 millimetres and 600 millimetres below surface, notably in TP 25, part of the expanded TP10 where three out of four quadrats had artefacts in spit 6 (Table 5-2). White (2021) has recently argued that stratification can survive in open sites and that careful excavation has the potential to separate what might initially appear to be a comingled palimpsest of assemblages. While it is tempting to infer a spike in artefact numbers at depth in TP 10, 24, 25 and 26 may be evidence of such survival of different eras of occupation, it is more likely a continuum of artefact occurrence through the soil profile and the artefacts themselves from that depth are disparate in terms of stone materials. Post deposition disturbance and bioturbation is a more likely explanation for artefacts at depth in this instance.

5.2.1 GENTLE SLOPE SAMPLE AREA 1

The landform of sample area 1 is a gentle slope identified as an area of moderate archaeological potential. The area slopes very gently down from the east to the creek terrace in the west. The landform is about 59,300 square metres (5.93 hectares) and has had a moderate level of disturbance in the form of tree clearing and cultivation. There are two dams associated with this landform, a small one in the southeast and a larger one in the northwest. The construction of these would have disturbed the area of their immediate footprint. The test pits excavated in this northern

transect had a depth of approximately 1000 millimetres with the silty clay layer continuing below 1000 millimetres in Test pit 21.

Sampling of this landform consisted of two transects placed to test the northern and southern side of the gentle slope. Transect 1 consisted 4 test pits (18-21) spaced 20 metres apart. There were four artefacts in total recovered, one in each TP19 and TP 20 and two in TP 21 with TP 18 having no artefacts (Figure 5.1 and Table 5-2). Test pit 17 was originally to be part of this transect but was not excavated as its location on the transect was assessed as having undergone a higher degree of disturbance than the other TPs on this transect.

Transect 2 was placed on the southern side of the gentle slope and excavated from east to west. This transect consisted of test pits 8-16, 20m apart (Figure 5.1 and Table 5-2). TPs 15 and 16 yielded no artefacts while TPs 11-14 exhibited low to moderate artefact density. TP10 is close to the break of slope above the creek flat and had 13 artefacts. Test pits 22 and 23 were excavated 20m either side of TP10 to determine the extent of the scatter associated with concentration. Test pit 23 was sterile, but TP 22 (north of TP10) had 8 artefacts. An additional 3 quadrats were excavated to bring TP10 to 1 metre by 1 metre in plan area (TPs 24, 25 and 26). A total of 38 artefacts were recovered from this enlarged test pit. The north – south perpendicular transect from TP23 through TPs 10 and 22 was continued with TPs 27 (4 artefacts), 28 (8 artefacts) and 29 (0 artefacts).

The overall pattern of distribution was one of a low density but relatively consistent artefacts scatter of 4-12 artefacts per square metre further from the creek, increasing to 16-32 artefacts per metre square closer to the creek. Test Pit 10, 24, 25 and 26 represents a cluster of slightly higher density than the average, indicating the potential for more dense working areas to occur within the study area. Although the existence of six separate stone materials over the 38 artefacts spread through six spits in the expanded pits is not definitive evidence of the existence of an intact manufacturing location.

5.2.2 CREEK TERRACE SAMPLE AREA 2

Test excavation in the creek terrace landform area consisted of 11 test pits evenly placed near the western end of the study area (as identified potential through the predictive model). The maximum depth reached in this landform was about 800 millimetres. This is a flat area of approximately 14,100 square metres (1.41 Ha) adjacent to Bomaderry creek. It has been subject to moderate disturbance due to past land-use but was identified as an area of high archaeological potential based on the predictive model. Test pits excavated in this landform were up to 800 millimetres deep with clay encountered at variable depths from 500 millimetres to 600 millimetres. The transect in this area comprised a primary line of test pits running approximately parallel to the creek (TPs 1-7). TPs 4B, 5, 6 and 7 had artefacts, with a high concentration of 19 artefacts in TP5 (76/m^2). TP30 was excavated 20m east of TP5 to test the extent of the TP5 concentration (Figure 5.1 and Table 5-2).

5.2.3 EASTERN HILL CREST

The hill crest landform in the far east of the study area was not subject to test excavation. The hill crest is occupied by the livestock sale yards, which include large concrete pads, hardstands, effluent controls and other infrastructure and was consequently highly disturbed.

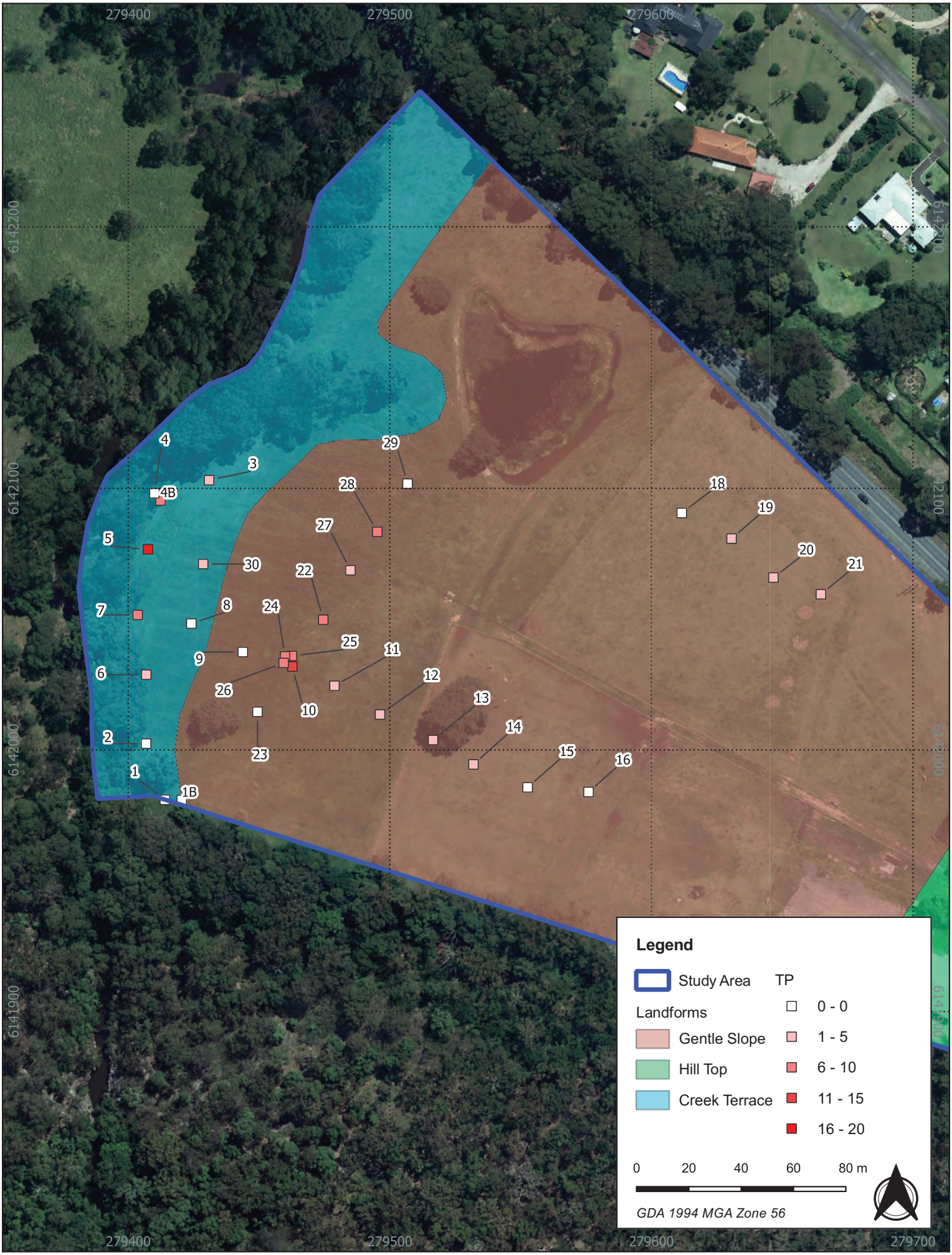


Figure 5.1- Test pits Location

2109 - 25 Moss Vale Road - N27790

Source: NSW LPI Basemap

Drawn by: SS Date: 2021-09-01S

AUSTRAL ARCHAEOLOGY

Figure 5.2 Test pit 21- excavated in gentle slope (landform)-Testing area 1



Figure 5.3 Test pit 10 - transitional stratigraphy from gentle slope to Creek terrace



Figure 5.4 Test pit-8, stratigraphy in creek terrace(landform) -Testing area 2



SOILS, DISTURBANCE AND FEATURES

Soil stratigraphy across the study area consisted of three main layers. The topsoils across the study area were generally comprised of a silt layer, transitioning into a silty clay layer that overlayed a solid clay layer. The stratigraphy of the gentle slope region has a very thin humic silt layer followed by a transitional layer at the depth of 200 millimetres which is later followed by yellowish-brown compact clay. Test pits 18, 19, 20 and 21 were excavated on the higher side of the gentle slope landform and exhibit a similar stratigraphy sequence, with the maximum depth reached in Test pit 21 (Figure 5.1 and Figure 5.2).

Test pits 13, 14 and 15 which are located on a lower slope transitional area between gentle slope and creek terrace has the addition of reddish-brown sandy loam as the second stratigraphic layer with limited presence of ash and finer roots (Figure 5.5). Test pits excavated in the creek terrace landform showed a silty loam layer with increased charcoal concentration (burnt roots) followed by a compact yellowish hard setting clay layer. Inclusions in this area included cobbles and pebbles (Figure 5.6). The stratigraphy of the study area exhibited the characteristic feature of Shoalhaven and Nowra landscapes.

As a result of the past land use practices like pastoral activities and other land clearing activities, the area is devoid of any native vegetation Such activities impact the artefact distribution patterns across the landform moving them from their primary context to a secondary context.

A summary of soil characteristics across the study area is provided in Table 5-3.

Table 5-3 Summary of soil characters within the three landforms

Soil Horizon	Soil Characteristics
A1 Horizon	Depth: 0-200 mm Munsell: 10YR3/3 – 10YR 4/2 PH: 7 Description: yellowish-brown, soft, silty loam humic layer, with A diffuse transition occurring between 100 to 200 mm into Horizon A2.
A2 Horizon	Depth: 150-3000 mm Munsell: 10YR 4/1 - 10YR 6/2 PH: 7 Description: Mid brown to reddish-brown soft, sandy – clay. Clear transition with B-Horizon.
B Horizon	150 - 1000 mm Munsell: 7.5YR 5/4 – 10Y 2/2 PH: 6.9 yellowish brown – reddish brown colour Description: Compact clay.

Figure 5.5 North section of test pit 13 showing reddish-brown sandy clay layer



Figure 5.6 North section of Test Pit 7, deposition pattern of the Creek terrace area



ARTEFACT ASSEMBLAGE

A total of 114 artefacts were recovered from the test excavation. They were found from two different landforms. In general, a higher number of the artefacts were recovered from the creek terrace landform, particularly from Test Pit 5 (n=18, 72/m^2).

5.3 LITHICS ANALYSIS

This lithic analysis aims to provide details of the stone material identified during the test excavation using standard terminology for artefact analysis taken from Holdaway & Stern (2013) and McCarthy (1976). Detailed artefact analysis entailed recording several characteristics for each artefact. Stone artefact raw materials were examined through a hand lens (x 10 magnification). Each artefact was recorded in database form, suitable for comparative analysis on a local and regional basis. The terminology used in the analysis is defined in Table 5-3.

Table 5-4 Terminology used in the identification of stone tools

Analytical Terms	Definition
Angular fragment / Debitage	A piece of debris exhibiting evidence of knapping but lacking key diagnostic traits (e.g., platform, termination, bulb of percussion)
Backing	An abrupt retouch normally found on one lateral margin of a tool and opposite the working edge.
Bladelet	A small (generally 8-12mm in width) example of a blade; a cutting or scraping tool that is prepared through retouch of an initial flake (blade blank) at least twice as long as it is wide.
Core	A nodule or block of siliceous rock from which sharp-edged slivers of stone are struck (generally with a hammerstone).
Cortex	The weathered outer layer of rock, differing in chemical and optical properties to the unweathered interior.
Distal flake	The termination end of a partial (broken) flake.

Analytical Terms	Definition
Dorsal surface	Outer surface of a flake (former surface of the core) characterised by cortex and/or negative concavities (flake scars) and ridges denoting prior removal of flakes.
Flake	A sliver of stone struck from a core exhibiting characteristic traits of force fracture.
Knapping	The process of fracturing flakes of stone from a core
Lateral margin	Left and right edges of a flake (platform oriented upward when viewing the ventral surface and distal end oriented upward for the dorsal surface).
Platform	Planar surface marking the location from which the flake was struck from the core.
Primary flake	Initial flake struck from a weathered cobble with a dorsal surface covered in cortex and lacking prior flake scars.
Proximal flake	The platform end of a partial (broken) flake.
Retouch	Alteration of the cutting edges of a flake or tool to refine sharpness, shape, angle or strength.
Termination	End of a flake opposite the platform denoting the place the force applied by the hammerstone exited the core.
Tertiary flake	Flake lacking dorsal or platform cortex indicating a high degree of prior reduction of the core from which it was knapped.
Ventral surface	Inner surface of a flake originally attached to a core exhibiting one or more traits of conchoidal fracture including a bulb of percussion, bulbar scar and ripple marks.

5.3.1 RESULTS OF THE ANALYSIS

The artefacts recovered during the test excavation program within the study area underwent a detailed lithics analysis by Pauline Ramsey (Archaeologist, Austral) and Paul Howard (Senior Archaeologist, Austral). The distribution of artefacts within the test pits is presented in Table 5-2 and the types of artefacts recovered are shown in Table 5-5 . Details about artefact analysis are presented in attached as Appendix D in the Aboriginal Archaeological Technical Report (Appendix 8 of the ACHA).

In terms of stone materials used for artefact manufacture, the assemblage showed diversity with 9 different material types recorded, although of these materials' chert comprised 50% of the assemblage. Silcrete (17.5%) and jasper (14.9%) with the remaining six materials forming minor components (Table 5-5).

The assemblage exhibits a moderate to a high degree of fragmentation, with less than half its number (n=53, 46.5%) being complete diagnostic artefacts. This compromises the validity of an analysis of the assemblage in separate stone material parts and instead requires an analysis of the overall assemblage as one complete unit.

Table 5-5 Artefact types and frequencies

	Quartz	Chert	Basalt	Chalc' dy	Silcrete	Jasper	Hornfels	Q'zite	Tuff	Total	%
Flake	4	17	3	1	5	7	3		1	**41**	36.0
Bipolar Flake		1			1					**2**	1.8
Proximal Flake Fragment	2	10			3	2				**17**	14.9

	Quartz	Chert	Basalt	Chalc' dy	Silcrete	Jasper	Hornfels	Q'zite	Tuff	Total	%
Medial Flake Fragment		2			1					**3**	2.6
Distal Flake Fragment	1	8	1		6	1		1		**18**	15.8
Core, single platform		1								**1**	0.9
Core, Multi-platform		2				1				**3**	2.6
Core Fragment	1					1				**2**	1.8
Retouched Flake					2					**2**	1.8
Implement		3		1						**4**	3.5
Flaked Piece	1	13			2	5				**21**	18.4
Totals	**9**	**57**	**4**	**2**	**20**	**17**	**3**	**1**	**1**	**114**	100
Percentage	7.9	50.0	3.5	1.8	17.5	14.9	2.6	0.9	0.9	100	

There is a moderate range of technological categories represented with all of the artefacts being part of the flaked artefact assemblage. An examination of the ratio of flakes to cores is able to be undertaken using partially diagnostic artefacts in the form of proximal and distal flake fragments and also with regard to stone materials by adapting a 'minimum numbers' approach to the frequency of artefact occurrence (Hiscock, 2002). For example, there are six chert distal flake fragments and ten chert proximal flake fragments – this is representative of a total of ten chert flakes in terms of 'minimum numbers'. The fragmented flakes represent 18 flakes in total, which added to the tally of complete flakes (41) is a total of 59 flakes to 3 cores, or approximately 20 flakes per core. This is a high ratio of flakes to cores which may be interpreted as an indicator of cores being moved on from the site rather than being discarded in the study area.

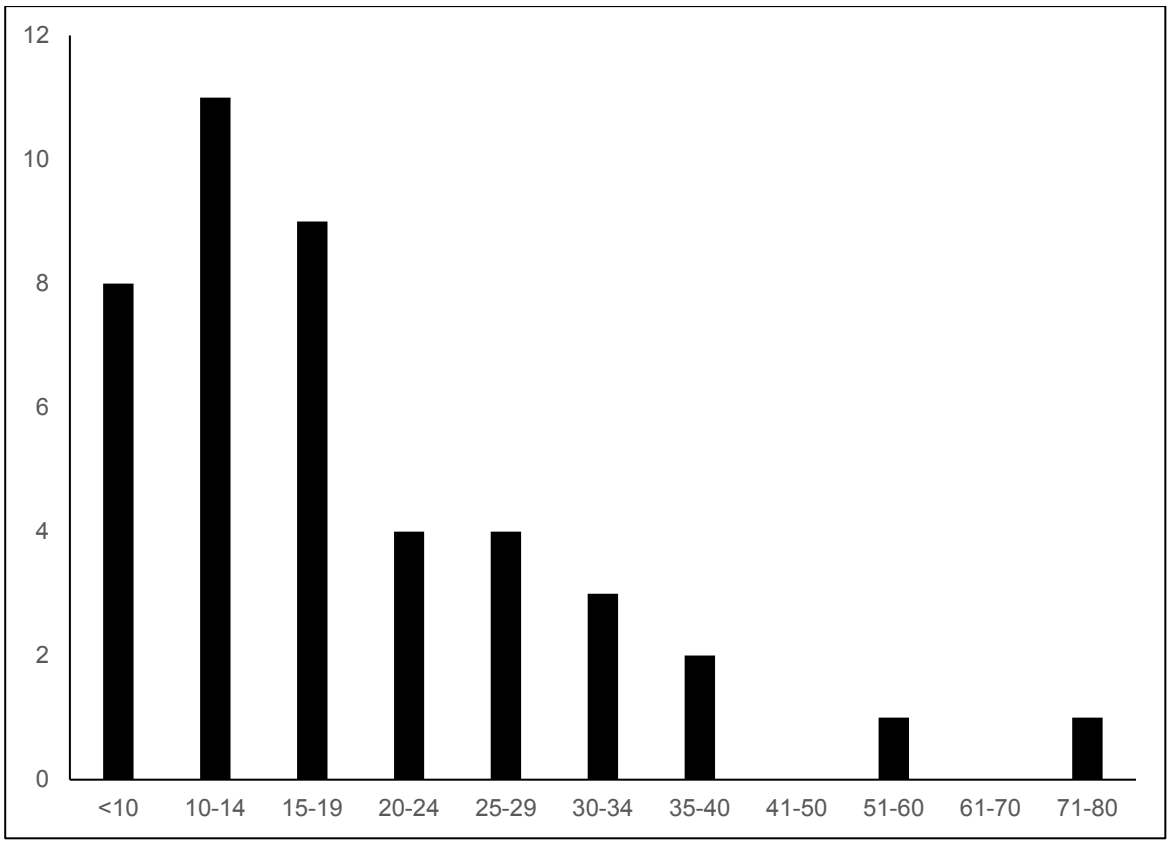


Figure 5.7 Flake Percussion Length (all materials)

Figure 5.7 summarises length classes for complete flakes from the sub surface assemblages. Overall, the flakes were small, with more than half (n=28, 62%) being less than 20mm in percussion length. In addition to being small, the flake assemblage shows a low degree of specialisation in terms of flake platform preparation and blade production. Of the 58 artefacts that exhibit striking platforms (complete flakes and proximal flake fragments), 47 (77%) exhibited flaked platforms and the remainder were crushed and/or sinuous. Facetted platforms were completely absent suggesting a lack of detailed core preparation. Similarly, elongated flakes were rare. Flake elongation is a measure of the extent to which flakes are wide in comparison to their percussion length. It is a feature analysed in order to determine the extent of 'blade' manufacture, and thus arrive at some indication of the economy of flaking trying to be achieved and, further, whether or not people were attempting to produce flakes for further transformation into backed artefacts. For the purposes of stone tool analysis, a blade is defined as a flake the length of which is twice as long (or greater) as its width, and which has approximately parallel lateral margins (Odell 2003: 45, Andrefsky 2007:253). Elongation is generally determined by dividing flake length by width to arrive at an index. In this manner, a flake with an index of 2 is a blade, and an index of 1 is equally as long as wide, and 0.5 is twice as wide as long.

The mean elongation index of all unmodified flakes is 1.29, with the median value at 1.17. Only three flakes exceeded an elongation ratio of 2.0 and an additional four were blade like with elongation ratios in excess of 1.75. There is no particular tendency towards any particular size class being more elongated than others. Figure 5.8 illustrates the overall trend of flakes being slightly longer than wide, with very few being blades or blade like. In this figure, the centre trend line is the point at which flakes are exactly as long as wide, the upper line indicates the point at which they are twice as wide as long, and the lower line twice as long as wide (a blade).

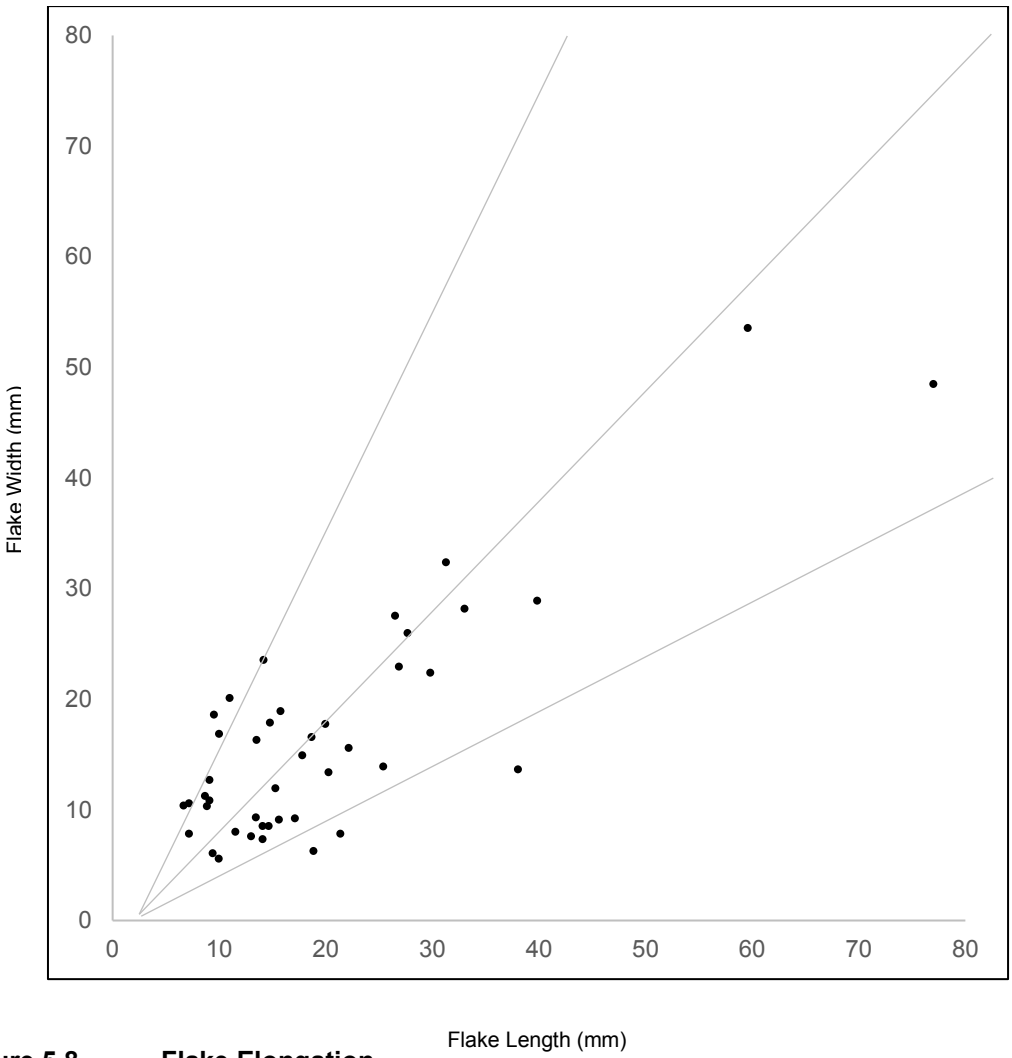


Figure 5.8 Flake Elongation

In summary, flakes were very small, prepared in a simple way for fracture, and were about as long as they were wide with no strong speciality evident. Bipolar flakes were present in small proportion, one of silcrete and one of quartz. With more flakes of these materials being removed with hertzian initiation, this is suggestive that cores of these were small when they entered the study area and were flaked beyond their inertia threshold for handheld flaking and were flaked in a bipolar fashion to extract any last useable flakes.

Only six artefacts (5.3%) exhibited retouch, those made of silcrete, chert and chalcedony.

5.4 ABORIGINAL SITE EXTENT

On the basis of the artefact distribution from the test excavation we have identified an artefact scatter of varying density, albeit mainly low. The artefact scatter encompasses the gentle slope and creek flat area, there being a continuum of artefacts across these two landforms. The artefact scatter contained a total of 114 artefacts with a reasonably even distribution across the study area. Several loci of higher density clusters were recorded towards the base of the gentle slope and outer edge of the creek terrace. Overall, the density of the scatter increases with proximity to the creek, the zone of 10-50m from the creek appears to be the densest, with material east of this zone considerably sparser on average. Initially, this was interpreted as 3 individual sites and registered as such with AHIMS (Table 5-5). However, further analysis recognised that the site represents the same sub-surface archaeological expression/artefact scatter, albeit spread over two landforms (gentle slope and creek terrace) and associated with several loci of higher density clusters. The extent of the site is shown in Figure 5.14, covering an area of approximately 350 metres x 140 metres, Sites AHIMS #52-5-0997 and AHIMS #52-5-0998 will be subsumed by AHIMS #52-5-0996.

Table 5-6 Summary of AHIMS listings which form Moss Vale Road Artefact Scatter

Site ID #	Site name	Datum	Zone	Easting	Northing
52-5-0996	Moss vale road artefact scatter 1	GDA	56	279627	6142082
52-5-0997	Moss vale road Artefact scatter 2	GDA	56	279504	6142040
52-5-0998	Moss vale road artefact scatter 3	GDA	56	279432	6142095

Figure 5.9 Landscape view of Moss vale Road Artefact Scatter near the north-eastern corner



Figure 5.10 Landscape view of Moss vale Road Artefact Scatter -the gentle slope



Figure 5.11 Landscape view of Moss vale Road Artefact Scatter- Creek Area



Figure 5.12 Selection of artefacts from Moss Vale Road Artefact Scatter



Figure 5.13 Selection of artefacts from Moss Vale Road Artefact Scatter



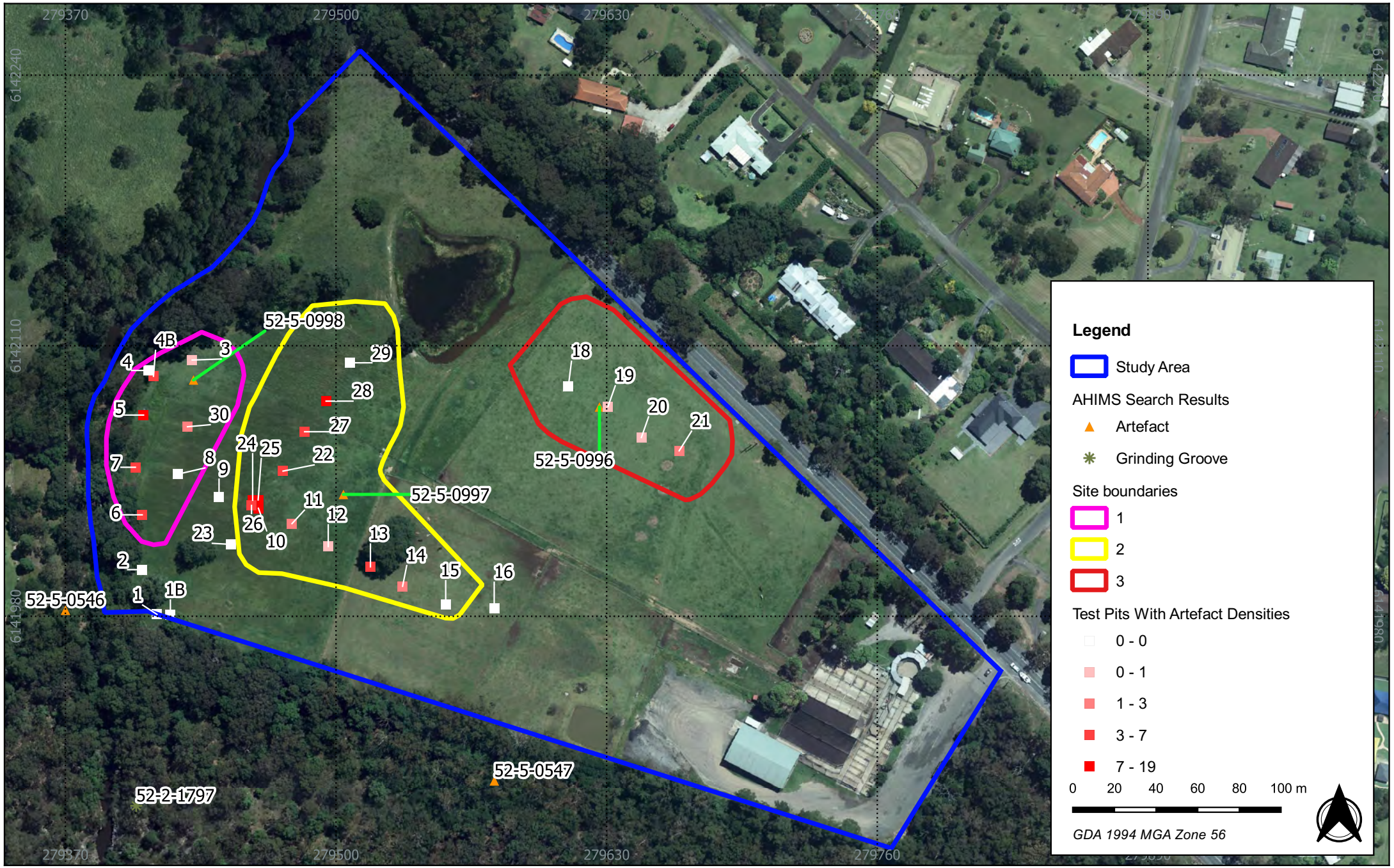


Figure 5.14 Site extent of the study area

25 - Moss Vale Road, Bomaderry

Source: NSW LPI Aerial

Drawn by: ARH Date: 2022-01-28

AUSTRAL ARCHAEOLOGY

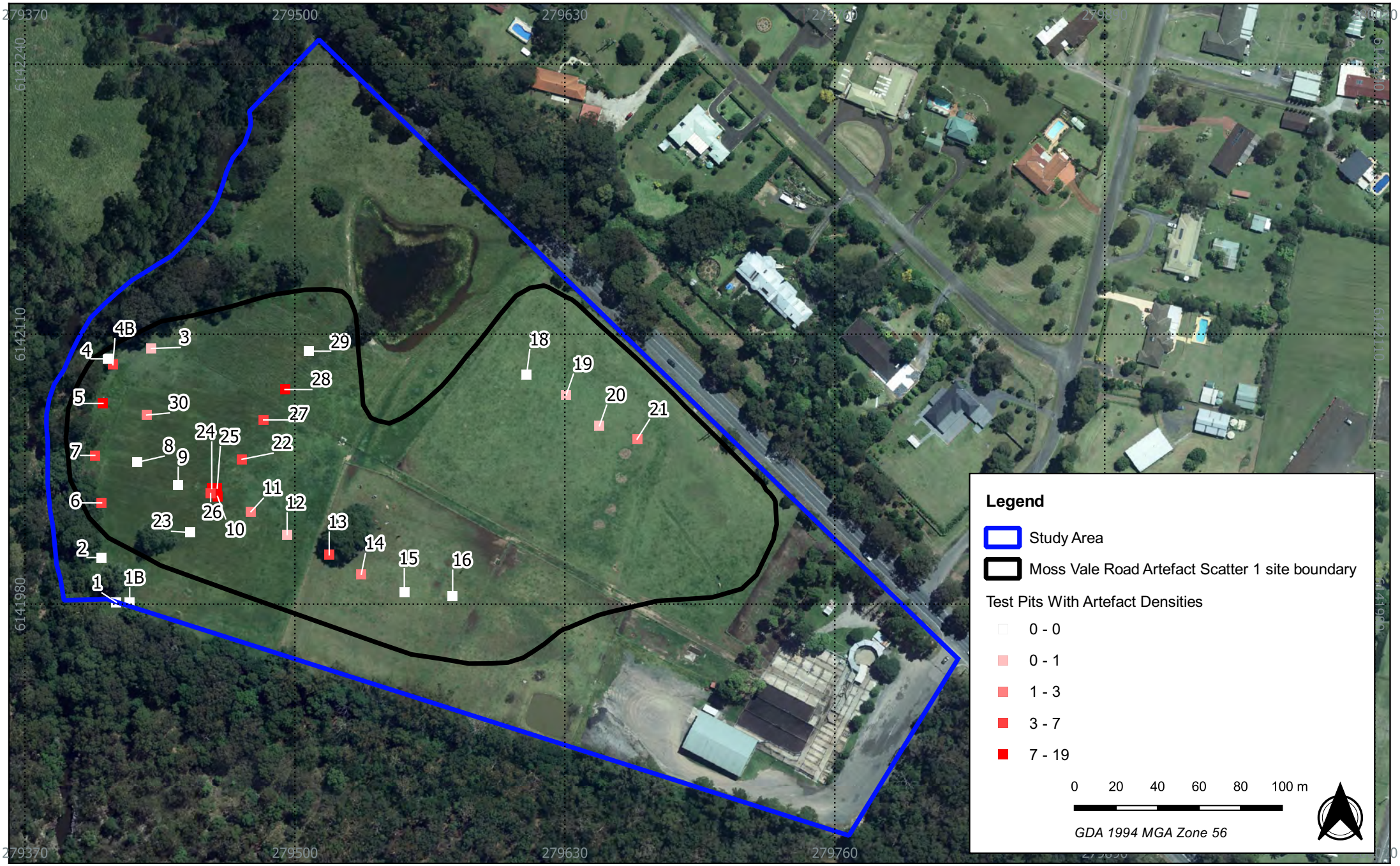


Figure 5.15 AHIMS site extent 52-5-0996

25 - Moss Vale Road, Bomaderry

Source: NSW LPI Aerial

Drawn by: ARH Date: 2022-01-28

AUSTRAL ARCHAEOLOGY

6 ANALYSIS AND DISCUSSION

The presence of Aboriginal heritage material in the study area is consistent with the predictive statement made for the study area.

The patterning of the archaeological material suggests that while disturbance has occurred, cultural material retains a degree of spatial patterning related to the process of its discard. This patterning is evident at a landform scale, with material becoming denser with proximity to the creek and at a feature scale, with higher density loci interspersed with background scatter.

The limited assemblage available for analysis shows a high degree of fragmentation which may be indicative of post deposition breakage (through damage by cattle or cultivation) but is perhaps more likely able to be interpreted as a result of this area having a paucity of quality stone materials, or materials being carried through the area near the end of their useful sizes. The wide range of materials but limited range of technological categories is worth noting. The assemblage appears to be one of expedience rather than specialisation, with most complete artefacts being small and exhibiting a low level of preparation. On the basis of this limited analysis, cores were being removed from the study area and discarded elsewhere, this interpretation is based on the high flake to core ratio. In the aggregate these indicators would suggest the study area was used for transitory occupation as opposed to being a base camp for lengthy periods.

7 CULTURAL HERITAGE VALUES

An assessment of significance seeks to determine and establish the importance or value that a place, site or item may have to the community at large. The concept of cultural significance is intrinsically connected to the physical fabric of the item or place, its location, setting and relationship with other items in its surroundings. The assessment of cultural significance is ideally a holistic approach that draws upon the response these factors evoke from the community.

7.1 BASIS FOR THE ASSESSMENT

The significance values provided in the Australia ICOMOS *Charter for the Conservation of Places of Cultural Significance* (the Burra Charter) are considered to be the best practice heritage management guidelines in Australia (Australia ICOMOS 2013a). The Burra Charter defines cultural significance as:

> *"…aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups." (Australia ICOMOS 2013a, p.2)*

The Burra Charter significance values outlined in Table 7-1; these are frequently adopted by cultural heritage managers and government agencies as a framework for a more holistic assessment of significance.

Table 7-1 Definitions of Burra Charter significance values (Australia ICOMOS 2013b)

Value	Definition
Aesthetic	Refers to the sensory and perceptual experience of a place. That is how a person responds to visual and non-visual aspects such as sounds, smells and other factors having a strong impact on human thoughts, feelings and attitudes. Aesthetic qualities may include the concept of beauty and formal aesthetic ideals. Expressions of aesthetics are culturally influenced.
Historic	Refers to all aspects of history. For example, the history of aesthetics, art and architecture, science, spirituality and society. It therefore often underlies other values. A place may have historic value because it has influenced, or has been influenced by, a historic event, phase, movement or activity, person or group of people. It may be the site of an important event. For any place, the significance will be greater where the evidence of the association or event survives at the place, or where the setting is 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 such change or absence of evidence.
Scientific	Refers to the information content of a place and its ability to reveal more about an aspect of the past through examination or investigation of the place, including the use of archaeological techniques. The relative scientific value of a place is likely to depend on the importance of the information or data involved, on its rarity, quality or representativeness, and its potential to contribute further important information about the place itself or a type or class of place or to address important research questions.
Social	Refers to the associations that a place has for a particular community or cultural group and the social or cultural meanings that it holds for them.

Value	Definition
Spiritual	Refers to the intangible values and meanings embodied in or evoked by a place which give it importance in the spiritual identity, or the traditional knowledge, art and practices of a cultural group. Spiritual value may also be reflected in the intensity of aesthetic and emotional responses or community associations and be expressed through cultural practices and related places. The qualities of the place may inspire a strong and/or spontaneous emotional or metaphysical response in people, expanding their understanding of their place, purpose and obligations in the world, particularly in relation to the spiritual realm. The term spiritual value was recognised as a separate value in the Burra Charter, 1999. It is still included in the definition of social value in the Commonwealth and most state jurisdictions. Spiritual values may be interdependent on the social values and physical properties of a place.

In addition to the Burra Charter significance values, other criteria and guidelines have been formulated by other government agencies and bodies in NSW to assess the significance of heritage places in NSW. Of particular relevance to this assessment are the guidelines prepared by the Australian Heritage Council and the Department of the Environment, Water, Heritage and the Arts (DEWHA), and Heritage NSW (Australian Heritage Council & DEWHA 2009, DECCW 2010a, OEH 2011b, NSW Heritage Office 2001).

The Guide (OEH 2011b, p.10) states that the following criteria from the NSW Heritage Office (2001, p.9) should be considered:

- **Social value:** Does the subject area have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons?
- **Historic value:** Is the subject area important to the cultural or natural history of the local area and/or region and/or state?
- **Scientific value:** Does the subject area have potential to yield information that will contribute to an understanding of the cultural or natural history of the local area and/or region and/or state?
- **Aesthetic value:** Is the subject area important in demonstrating aesthetic characteristics in the local area and/or region and/or state?

OEH (2011b, p.10) states that when considering the Burra Charter criteria, a grading system must be employed. Austral will use the following grading system to assess the cultural values of the study area and its constituent features. These are outlined in Table 7-2.

Table 7-2 Gradings used to assess the cultural values of the study area

Grading	Definition
Exceptional	The study area is considered to have rare or outstanding significance values against this criterion. The significance values are likely to be relevant at a state or national level.
High	The study area is considered to possess considerable significant values against this criterion. The significance values are likely to be very important at a local or state level.
Moderate	The study area is considered to have significance values against this criterion; these are likely to have limited heritage value but may contribute to broader significance values at a local or State level.
Little	The study area is considered to have little or no significance values against this criterion.

7.2 ASSESSMENT OF SIGNIFICANCE

The following section addresses the Burra Charter significance values with reference to the overall study area.

7.2.1 AESTHETIC SIGNIFICANCE VALUES

Aesthetic values refer to the sensory, scenic, architectural and creative aspects of the place. These values may be related to the landscape and are often closely associated with social and cultural values.

The study area is located in the catchment zone of Shoalhaven River and a fourth-order stream-Bomaderry Creek. A location such as this is generally considered an area of great significance due to the abundance of resources that exist at freshwater in inland environments, namely sources of water and food including freshwater fauna as well as terrestrial fauna seeking water sources.

The study area has landforms that are considered an ideal location for Aboriginal occupation, with a view over Bomaderry Creek towards the west and south. The physical setting of the study area is therefore considered to have moderate aesthetic value, but the archaeology itself does not lend itself to having aesthetic value.

7.2.2 HISTORIC SIGNIFICANCE VALUES

The assessment of historic values refers to associations with particular places associated with Aboriginal history. Historic values may not be limited to physical values but may relate to intangible elements that relate to memories, stories or experiences. There is no known association with any known important Aboriginal person and the study area. The study area does not have 'historical significance' within the meaning of the term for the purposes of significance assessment.

The geographical region of the study area has a long history of occupation by Aboriginal people. The AHIMS search results have shown, about 113 sites within the radius of 5kms of the study area. The nature of these sites varied from Artefact scatters, PADs, Artefact PADs and Open campsites, indicating the significant presence of the traditional communities within the study area.

7.2.3 SCIENTIFIC SIGNIFICANCE VALUES

Scientific significance generally relates to the ability of archaeological objects or sites to answer research questions that are important to the understanding of the past lifeways of Aboriginal people. Australia ICOMOS (2013b, p.5) suggests that to appreciate scientific value, that the following question is asked: "*Would further investigation of the place have the potential to reveal substantial new information and new understandings about people, places, processes or practices which are not available from other sources?*".

In addition to the above criteria, The Guide (OEH 2011b, p.10) also suggests that consideration is given to the Australian Heritage Council and DEWHA (2009) criteria, which are particularly useful when considering scientific potential:

- **Research potential:** does the evidence suggest any potential to contribute to an understanding of the area and/or region and/or state's natural and cultural history?
- **Representativeness:** how much variability (outside and/or inside the subject area) exists, what is already conserved, how much connectivity is there?
- **Rarity:** is the subject area important in demonstrating a distinctive way of life, custom, process, land-use, function or design no longer practised? Is it in danger of being lost or of exceptional interest?
- **Education potential:** does the subject area contain teaching sites or sites that might have teaching potential?

With regard to the study area the following assessment is made:

Research Potential: The archaeology of the study area has moderate research potential. There are isolated loci of moderate to high artefact density that offer the opportunity of large, excavated assemblages for technological analysis. Deeper soil profiles offer potential to separate flaking events although cultivation may have compromised this attribute.

Representativeness: The archaeology of the study area would appear broadly representative of its class of site, and illustrative of general models of site location.

Rarity. The archaeology of the study area is not rare, but an example of a widespread archaeology flanking local creeks.

Education Potential: The archaeology of the site has low education potential in its natural state, as all artefacts are subsurface and not available for instruction.

7.2.4 SOCIAL AND SPIRITUAL SIGNIFICANCE VALUES

As social and spiritual significance are interdependent, Austral has undertaken a combined assessment of these values. The Consultation Requirements specify that the social or cultural values of a place can only be identified through consultation with Aboriginal people.

No comments regarding the cultural values of the study area were made by Registered Aboriginal Parties during the consultation process of the project.

7.3 STATEMENT OF SIGNIFICANCE

Statements of significance for identified Aboriginal sites within the study area are presented below. The statements of significance have been formulated using the Burra Charter significance values and relevant NSW guidelines (DECCW 2010a, OEH 2011b, Australia ICOMOS 2013a).

Moss Vale Road Artefact Scatter is of moderate significance. It is an extensive though mostly low-density artefact scatter, which is a common site type in the region. It retains moderate patterning despite agricultural disturbance. It has potential to provide further information to improve our understanding of the Aboriginal use of the type of area through analysis of a larger and statistically valid sample of artefacts and more detailed excavation techniques.

Heritage NSW specifies the importance of considering cultural landscapes when determining and assessing Aboriginal cultural values. The principle behind this is that '*For Aboriginal people, the significance of individual features is derived from their inter-relatedness within the cultural landscape. This means features cannot be assessed in isolation and any assessment must consider the feature and its associations in a holistic manner"* (DECCW 2010f).

Culturally, the location of the study area close to the fresh water sources would have been of high value to the traditional communities and interlinked with surrounding localities as part of a subsistence strategy.

8 PROPOSED ACTIVITY

This section outlines, according to Heritage NSW guidelines, the potential harm that the proposed activity may have on identified Aboriginal objects and places within the study area (OEH 2011b, DECCW 2010a).

8.1 LAND-USE HISTORY

The study area has been previously cleared of vegetation, likely during the days of early European settlement when logging and clearance for agricultural activities were undertaken. Vegetation clearance has occurred throughout most of the study area, which has resulted in erosion along the slopes and creek banks within the study area.

The main impacts relate to past agricultural practices, extensive land clearance, animal grazing, the construction of buildings, fences and vehicle tracks, tree harvesting, installation of overhead power lines and ongoing encroachment of residential development surrounding the study area. These activities would have contributed to the removal of the original native vegetation as the study area is now covered in dense native and introduced grasses with regrowth of native vegetation and intrusive weeds along the creeks and gullies.

Land clearance would have resulted in soil disturbance and topsoil movement and loss that, coupled with erosion on slopes across the majority of the study area, accounts for widespread artefact displacement rather than the complete destruction of Aboriginal sites and the limited archaeological potential across this disturbance zone is more likely to reflect the inherent unsuitability of much of the terrain than the prior loss of the potential resource.

Historically a large tannery was built by Thomas Shepherd at the western end of the study area adjacent to Bomaderry Creek and is denoted in historical maps as ‘Factory’. This area would have undergone significant disturbance during the construction and operation of the tannery and therefore, the area where it was located is considered to be of low archaeological potential

The site itself has been used for agricultural practices with livestock structures and clearing of the land as well as the construction of two dams on the property, one in the North West corner, built prior to 1961 (Figure 8.1) and another built between 1997 and 2003 in the South-East of the Property (Figure 8.3) (Figure 8.4).

.

Table 8-1 Summary of past land uses within the study area and the potential impacts on archaeological resources

Past land uses	Potential impacts on archaeological resources
Historical land clearance	Loss of native trees, shrubs and grasses and livestock grazing would lead to the potential loss of scarred trees, increased erosion and potential dispersal or disturbance of surface and subsurface artefacts across the predominantly sloping terrain of the study area.
Agriculture	Ploughing and harrowing as well as livestock movement and grazing would have exacerbated topsoil disturbance and erosion across the sloping terrain over much of the study area.
Factory	A large tannery was constructed at the western end of the study area, this would have resulted in a high level of disturbance in the location is marked from the initial construction and works undertaken whilst operational.
Construction of Stock Yards and fencing associated with farming practices	Moderate to high levels of earth disturbance leading to the potential disturbance and dispersal of artefacts from their stratigraphic context.

The field survey undertaken for the study area identified three landforms within the study area. Of these three landforms, only one landform- Hilltop was considered as high disturbance zone based on the modified landscape in the form of the cattle-yards seen on the eastern end of the study area. The landform also has the presence of fill material, road base material and stockpiles of soil. The landform is modified by the cattle-yards, the nearby dam, storage sheds, effluent treatment works and other infrastructure (Figure 8.5).

Disturbance in the form of cultivation and construction activities has impacted the study area. These disturbances remained in the higher horizons of the soil profile, and only minor impacts were seen in lower deposits.

8.2 PROPOSED ACTIVITY

The proposed activity at this stage consists of the subdivision and development of the study area into residential lots with associated access roads.

It is understood that these proposed works will involve:

- large scale ground works including extensive earth excavation and levelling;
- The installation of infrastructure, such as houses, roads and services; and the lawn bowls complex,
- The clearance of existing vegetation within areas marked for development.

8.3 ASSESSING HARM

This section outlines the assessment process for addressing potential harm to Aboriginal objects and/or places within the study area, as outlined by Heritage NSW (OEH 2011b, p.12).

8.3.1 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

An objective of the NPW Act, under Section 2A(1)(b)(i) is to conserve "*places, objects and features of significance to Aboriginal people*" through applying the principles of ecologically sustainable development (ESD) (Section 2A (2)). ESD is defined in Section 6(2) of the *Protection of the Environment Administration Act 1991* (NSW) as "*…the effective integration of social, economic and environmental considerations in decision-making processes".* ESD can be achieved with regards to Aboriginal cultural heritage, by applying principle of inter-generational equity, and the precautionary principle to the nature of the proposed activity, with the aim of achieving beneficial outcomes for both the development, and Aboriginal cultural heritage.

INTERGENERATIONAL EQUITY

The principle of intergenerational equity is where the present generation ensure the health, diversity and productivity of the environment for the benefit of future generations. The Department of Environment and Climate Change (DECC), now Heritage NSW, states that in terms of Aboriginal cultural heritage "*intergenerational equity can be considered in terms of the cumulative impacts to Aboriginal objects and places in a region. If few Aboriginal objects and places remain in a region (for example, because of impacts under previous AHIPs), fewer opportunities remain for future generations of Aboriginal people to enjoy the cultural benefits of those Aboriginal objects and places.*" (DECC 2009, p.26).

The assessment of intergenerational equity and understanding of cumulative impacts should consider information about the integrity, rarity or representativeness of the Aboriginal objects and/or places that may be harmed and how they illustrate the occupation and use of the land by Aboriginal people across the locality (DECC 2009, p.26).

Where there is uncertainty over whether the principle of intergenerational equity can be followed, the precautionary principle should be applied.

PRECAUTIONARY PRINCIPLE

Heritage NSW defines the Precautionary Principle as "*if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent environmental degradation*" (DECC 2009, p.26).

The application of the precautionary principle should be guided through:

- A careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment.
- An assessment of the risk-weighted consequences of various options.

DECC (2009, p.26) states that the precautionary principle is relevant to the consideration of potential impacts to Aboriginal cultural heritage, where:

- The proposal involves a risk of serious or irreversible damage to Aboriginal objects and/or places or to the value of those objects and/or places.
- There is uncertainty about the Aboriginal cultural heritage values, scientific, or archaeological values, including in relation to the integrity, rarity or representativeness of the Aboriginal objects or places proposed to be impacted.

Where either of the above is likely, a precautionary approach should be taken, and all effective measures implemented to prevent or reduce harm to Aboriginal cultural heritage values.

8.3.2 TYPES OF HARM

When considering the nature of harm to Aboriginal objects and/or places, it is necessary to quantify direct and indirect harm. The types of harm, as defined in the Guide (OEH 2011b, p.12), and are summarised in Table 8-2. These definitions will be used to quantify the nature of harm to identified Aboriginal objects and/or places that have been identified as part of this assessment. The Code states that the degree of harm can be either total or partial (DECCW 2010c, p.21).

Table 8-2 Definition of types of harm

Type of harm	Definition
Direct harm	May occur as the result of any activity which disturbs the ground including, but not limited to, site preparation activities, installation of services and infrastructure, roadworks, excavating detention ponds and other drainage or flood mitigation measures, and changes in water flows affecting the value of a cultural site.
Indirect harm	May affect sites or features located immediately beyond, or within, the area of the proposed activity. Examples of indirect impacts include, but are not limited to, increased impact on art in a shelter site from increased visitation, destruction from increased erosion and changes in access to wild food resources.

8.4 IMPACT ASSESSMENT

This ACHA has included a programme of investigations that have characterised the nature, extent and significance of Aboriginal sites within the study area.

Figure 8.6 shows the proposed development footprint in relation to the known Aboriginal heritage sites as identified during this assessment. As a result of the proposed activity, the location of the registered sites will be directly impacted. The associated construction works with the proposed activity have the capacity to remove the Aboriginal artefacts and displace them from the original location impacting the scientific and research value. The proposed activity will directly impact the aesthetic value changing the aesthetic appeal of the study area.

The proposed development will have a high impact on the majority of the study area and thus location of sites Moss Vale Road Artefact Scatter1 (AHIMS # 52-5-0996) and the subsumed sites Moss Vale Road Artefact Scatter 2 (AHIMS # 52-5-0997) and Moss Vale Road Artefact Scatter 3 (AHIMS # 52-5-0998). The western most extent of the proposed development is a roughly north-south oriented access road that will, approximately, traverse the transect of TPs 10 (and associated expansion pits), 22, 27 and 28. Areas to the west of this will form a public reserve and as a consequence will be protected from development. This includes the highest density artefact concentration in Pit 5, but also moderate to high-density TPs 4B and 7. East of the access road will be subdivision components that will affect the majority of the site area, though in all likelihood areas of low density.

As illustrated in Figure 8.6, an area has been proposed as a conservation area/ Riparian zone in response to biodiversity/riparian conservation requirements for the broader project. A positive outcome of this conservation area is that any Aboriginal objects found within that area (i.e., the distance of 100m from the western boundary of the study area and consisting of the larger cluster of the subsurface artefacts associated with former site AHIMS # 52-5-0098) would not be subjected to any harm under the proposed development as it is located within the conservation and Riparian zone.

Overall, Moss Vale Road Artefact Scatter1 (AHIMS # 52-5-0996) and the subsumend sites, Moss Vale Road Artefact Scatter 2 (AHIMS # 52-5-0997) and Moss Vale Road Artefact Scatter 3 (AHIMS # 52-5-0998) will sufferer partial harm and a partial loss of value.



Figure 8.1 - 1961 Historic Aerial Photography

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Cultural Heritage Assessment Report

Source: LPI 1079_3N_007

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY



Figure 8.2 - 1979 Historic Aerial Photography

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Cultural Heritage Assessment Report

Source: LPI 2783_06_024

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY



Figure 8.3 - 1997 Historic Aerial Photography

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Cultural Heritage Assessment Report

Source: LPI 4344_05_088

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY



Figure 8.4 - 2003 Historic Aerial Photography

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Cultural Heritage Assessment Report

Source: LPI 5959_03_040

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY

Figure 8.5 Disturbance observed within the Hilltop landform in the study area



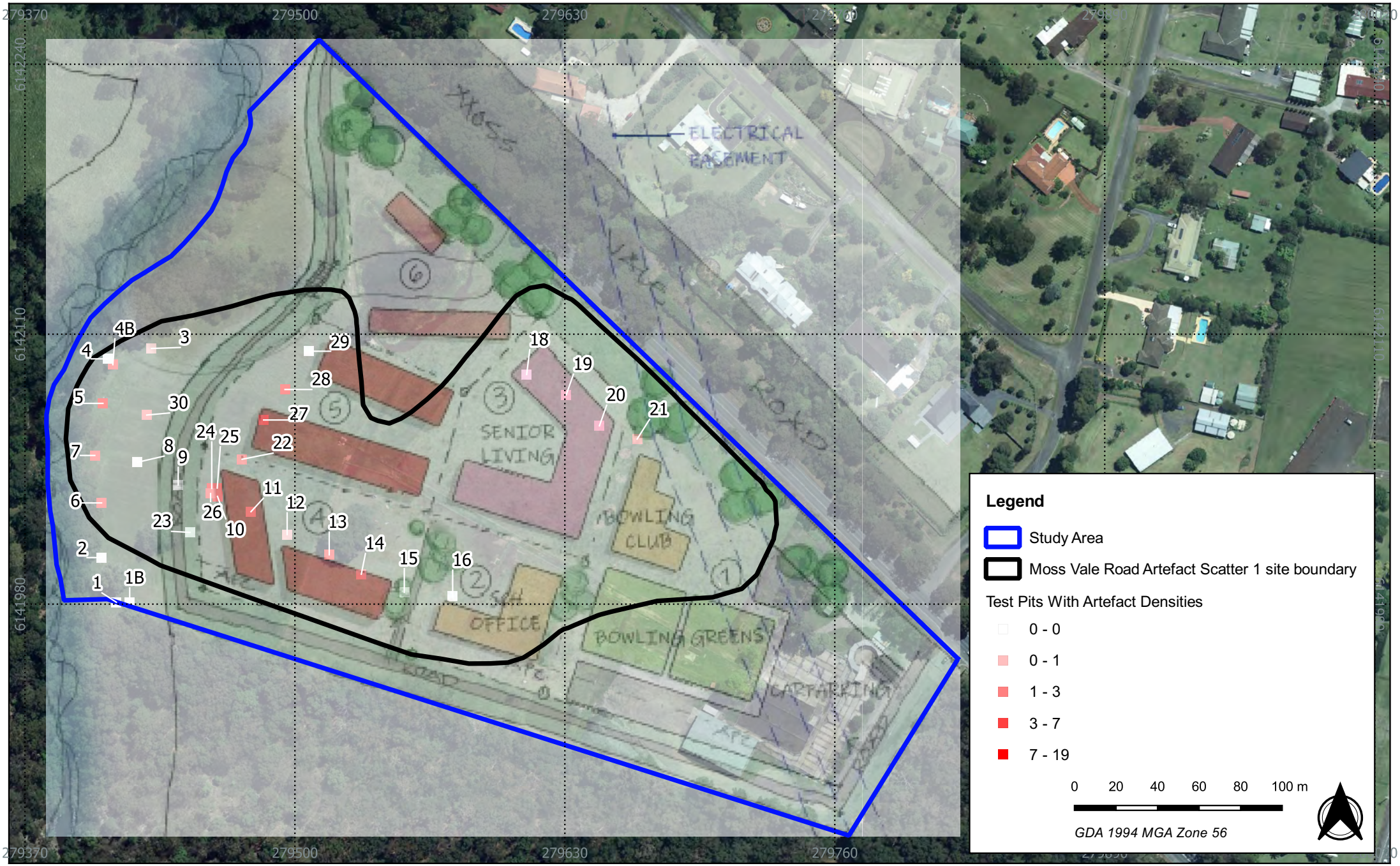


Figure 8.6 AHIMS site extent 52-5-0996 with Propsed development

25 - Moss Vale Road, Bomaderry

Source: NSW LPI Aerial

Drawn by: ARH Date: 2022-01-28

AUSTRAL ARCHAEOLOGY

9 AVOIDING AND MINIMISING HARM

The Burra Charter, advocates a cautious approach to change: "*do as much as necessary to care for the place and to make it useable, but otherwise change it as little as possible so that its cultural significance is retained*" (Australia ICOMOS 2013a, p.1). Based on this principle, this section identifies the measures that have been taken to avoid harm and what conservation outcomes have been achieved through the preparation of this ACHA.

9.1 DEVELOPMENT OF PRACTICAL MEASURES TO AVOID HARM

As a part of the test excavation program for the preparation of the Aboriginal Cultural Heritage Assessment Report the artefacts recovered have been properly recorded, analysed and stored in the Albion Park office of Austral Archaeology. The artefacts will be subject to a reburial process. The reburial location of the artefacts will be recorded with differential GPS coordinates within the study area, outside the direct impact zone of the proposed activity.

The development as currently proposed is situated to have a variety of effects on the Aboriginal objects of the study area. West of the western access road is a conservation area which contains the area of highest archaeological density. This area in isolation offers the highest research potential and conservation value of the study area and will not be developed.

Given the conservation of approximately 1.4 hectares of high archaeological potential landscape it is not considered feasible or necessary to further amend the proposed development – as a sufficient sample will be conserved (see also Section 8.4 and Figure 8.6).

9.2 STRATEGIES TO MINIMISE HARM

Following on from the establishment of the conservation area in the western riparian corridor it is possible to implement strategies to minimise harm to the archaeological material in the remaining development area. This study has indicated a potential for the archaeology of the site to inform our understanding of the Aboriginal occupation of these environments, and the test excavation has found areas that would serve as nuclei for such research. Salvage excavation of broader open areas surrounding TPs 10/24/25/26 and TP 28 would offer the opportunity to retrieve and analyse a larger assemblage of artefacts from her locality. This would form a useful addition to the story of Aboriginal use of the landscape.

It is possible while undertaking development activities that contractors may come across stone artefacts. One method to minimise the harm to these objects is to prepare an Ad Hoc Finds Protocol that guides contractors, under the provisions of an Aboriginal Heritage Impact Permit, on how to deal with varying levels of occurrence.

9.3 CUMULATIVE IMPACTS

Residential development such as this contributes to the loss of cultural landscapes once occupied by Aboriginal people. The proposed development is situated on land whose topography is widespread, and the cultural resources of the study area are mainly low density. We, therefore, consider the cumulative impact of this development on the archaeological resources of the area to be low. There is potential for any cumulate impact to be mitigated by the interpretive benefits of the results of salvage excavation, and the conservation of high-density areas.

10 RECOMMENDATIONS

The following recommendations are derived from the findings described in this ACHA. The recommendations have been developed after considering the archaeological context, environmental information, consultation with the local Aboriginal community, and the findings of the test excavation and the predicted impact of the planning proposal on archaeological resources.

It is recommended that:

1. Before any works occur, the proponent is to apply to Heritage NSW for an Aboriginal Heritage Impact Permit (AHIP) to partially harm site Moss Vale Road Artefact Scatter 1 (AHIMS # 52-5-0996), please note the boundaries of this site have expanded to incorporate the registered sites AHIMS # 52-5-0997 and AHIMS # 52-5-0996. This site is protected under Section 90 of the *NSW National Parks and Wildlife Act 1974* (NPW Act). The proponent must not undertake any development work on the site prior to receiving an AHIP.
2. A condition of the AHIP should be the salvage of a larger sample of artefacts from TPs 10, 13, 21, 22, 27 and 28. This salvage should be undertaken according to the salvage method provided in Appendix 6 of this report.
3. Prior to the commencement of any ground works related to the activity, all contractors and/or employees of contractors involved in ground disturbance works must attend a cultural heritage induction prepared and presented by a qualified archaeologist in cooperation with local Aboriginal people.
4. The proponent must prepare an Ad Hoc finds protocol to guide actions subsequent to finding suspected Aboriginal objects or remains. The protocol should be submitted as part of the AHIP application
5. Aboriginal ancestral remains may be found in a variety of landscapes in NSW. If any suspected human remains are discovered during any activity, you must:

- immediately cease all work at that location and not further move or disturb the remains
- notify the NSW Police and Heritage NSW's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location
- not recommence work at that location unless authorised in writing by Heritage NSW.

6. All Aboriginal objects collected during the archaeological testing will be reburied onsite at the nominated location (Appendix 7).
7. It is recommended that the Proponent continues to inform the Aboriginal stakeholders about the management of Aboriginal cultural heritage within the study area following the completion of the project. The consultation outlined as part of this ACHA is valid for 6 months and must be maintained by the proponent for it to remain continuous. If a gap of more than 6 months occurs, then the consultation will not be suitable to support an AHIP for the project.
8. A copy of this report should be forwarded to all Aboriginal stakeholder groups who have registered an interest in the project.

REFERENCES

AMBS Consulting 2006, 'Aboriginal Heritage Management Plan: West Dapto Release Area Final Report.'

Andrews, G, Daylight, C, & Hunt, J 2006, 'Aboriginal cultural heritage landscape mapping of coastal NSW, prepared for the Comprehensive Coastal Assessment'.

Artefact Heritage Pty Ltd 2018, *Nowra Bridge Project*, Pymont, NSW.

Attenbrow, V 2003, *Sydney's Aboriginal Past: Investigating the Archaeological and Historical Records*, University of New South Wales Press Ltd, Australia.

Austral Archaeology 2020, *Aboriginal Archaeological Technical Report No. 2003. 25, Moss Vale Road, Bomaderry, NSW*, Austral Archaeology.

Austral Archaeology Pty Ltd 2019, *49 Taylors Lane, Cambewarra, NSW; Aboriginal Archaeological Survey Report*.

Australia ICOMOS 2013a, *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance*, Australia ICOMOS, Burwood, VIC.

Australia ICOMOS 2013b, 'Practice Note: Understanding and assessing cultural significance'.

Australian Heritage Council & DEWHA 2009, 'Guidelines for the assessment of places for the National Heritage List'.

Biosis Pty Ltd 2010, *Tallawarra Lands: Part 3A Concept Plan Aboriginal Archaeological Assessment*.

Biosis Pty Ltd 2017, *Meroo Meadow Aboriginal Cultural Heritage Assessment*.

Biosis Pty Ltd 2018, 'Taylors Lane, Lot 116 DP 3060 Aboriginal Cultural Heritage Due Diligence Assessment'.

Biosis Pty Ltd 2019, *Taylors Lane (Lot 1 DP949932) Archaeological Report*, Prepared for Cardno.

BMT WBM Pty Ltd 2010, *Bomaderry Creek flood study*, Report for Shoalhaven City Council.

Boot, P 2002, *Didthul, Gulaga and Wadbilliga: An archaeological study of the Aboriginals of the New South Wales South Coast hinterland.* Unpublished PhD thesis, Australian National University, Canberra.

Bowler, JM et al. 2003, 'New Ages for Human Occupation and Climatic Change at Lake Mungo, Australia', *Nature*, vol. 42, pp. 837–840.

Buggey, S 1999, 'An approach to Aboriginal cultural landscapes', <https://www.pc.gc.ca/leg/docs/r/pca-acl/index_E.asp>.

Bureau of Meteorology n.d., *Climate statistics for Australian locations*, viewed 22 October 2020, <http://www.bom.gov.au/climate/averages/tables/cw_068188.shtml>.

Cardno 2016, *Bomaderry floodplain risk management study*, Report prepared for Shoalhaven City Council.

Clarke, E & Kuskie, P 2006, *Aboriginal Heritage and Cultural Mapping Project: Lower Shoalhaven River Valley – Stage 4A: Archaeological Predictive Modeling and Aboriginal Community Consultation*, Unpublished report to the Department of Environment and Conservation (NSW) and NSW National Parks and Wildlife Services South Coast Region.

Clarkson, C. Smith, M., Marwick, B., Fullagar, R, et al. 2015. "The archaeology, chronology and stratigraphy of Madjedbebe (Malakunanja II): A site in northern Australia with early occupation". *Journal of Human Evolution*. **83**: 46–64

Construction Sciences 2020, *Stage 1 Preliminary Site Investigation: 25 Moss Vale Road, Bomaderry, NSW*, Prepared for Southern Cross Community Housing Ltd c/- Allen Price & Scarratts Pty Ltd, 25 Moss Vale Road, Bomaderry, NSW.

DECC 2009, 'Operational Policy: Protecting Aboriginal Cultural Heritage', <https://www.environment.nsw.gov.au/resources/cultureheritage/09122ACHOpPolicy.pdf>.

DECCW 2010a, 'Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales'.

DECCW 2010b, 'Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010'.

DECCW 2010c, 'Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales'.

DECCW 2010d, 'Fact Sheet 1: What is Aboriginal cultural knowledge?'

DECCW 2010e, '*Code of practice for archaeological investigation of aboriginal objects in New South Wales*'.

DECCW 2010f, 'Fact Sheet 2: What is an Aboriginal cultural landscape?'

Department of Environment and Conservation 2005a, *Murni Dhungang Jirrar - Living in the Illawarra*.

Department of Environment and Conservation 2005b, *Early Contact Map*, Department of Environment and Conservation, Sydney.

Dibden, j 2018, *Aboriginal Archaeological Study for Moss Vale Road North (MVRN) Urban Release Area*.

Foley, R 1981, 'A Model of Regional Archaeological Structure', *Proceedings of the Prehistoric Society*, vol. 47, pp. 1–17.

Hazelton, PA, Conservation & Management, L 1992, *Soil landscapes of the Kiama 1:100 000 sheet*, Sydney: Dept. of Conservation and Land Management, viewed 5 December 2019, <https://trove.nla.gov.au/version/24715460>.

Hazelton, P.A. & Tille, PJ 1990, *Soil Landscapes of the Wollongong-Port Hacking 1:100 000 Sheet*, Soil Conservation Service of NSW, Sydney.

Hazelton, P. A. & Tille, PJ 1990, *Soil Landscape of the Wollongong-Port Hacking 1:100 000 Sheet*, Soil Conservation Service of NSW, Sydney.

Hiscock, P. 2002. Quantifying the size of artefact assemblages. *Journal of Archaeological Science* 29: 251–258.

Holdaway, S & Stern, N 2013, *A Record in Stone: The Study of Australia's Flaked Stone Artefacts.*, Aboriginal Studies Press, Melbourne.

Kass, T 2010, *A Thematic History of the City of Wollongong*, Wollongong City Council, Wollongong.

Kayandel Archaeological Services 2011a, *Shoalhaven Starches Gas Pipeline Scheme*.

Kayandel Archaeological Services 2011b, *Shoalhaven Starches Gas Pipeline Scheme*, Shoalhaven Council LGA, Bomaderry.

Kelleher Nightingale Consulting Pty Ltd 2010, *North Nowra Link Road*.

Kuskie, P 2008, *An Aboriginal Heritage Impact Assessment of a Proposed Ethanol Plant Upgrade at Shoalhaven Starched, Bomaderry, South Coast of New South Wales*, Manildra Group.

Lampert, R 1971, 'Coastal Aborigines of Southeastern Australia', in, *Prehistory of Australia*, Smithsonian University Press.

Lampert, RJ & Steele, DH 1993, 'Archaeological studies at Bomaderry Creek, New South Wales', in J Specht (ed.), *Commemorative Papers (Archaeology, Anthropology, Rock Art)*, The Australian Museum, Sydney, N.S.W., pp.55–75.

McCarthy, FD 1976, *Australian Aboriginal Stone Implements*, The Australian Museum Trust, Sydney.

McDonald, J 1997, *Interim Heritage Management Report: ADI Site, St Marys; Volume 1: Text*.

McElroy, CT et al. 1969, 'Sydney Basin: Shoalhaven Group', *Journal of the Geological Society of Australia*, vol. 16, pp. 357–366.

Navin, K 1991, *Archaeological Survey of North Nowra-Bomaderry Creek Link Road (Option 2) and Three Alignment Options*, Report to Mitchell McCotter & Associated Pty Ltd.

Navin Officer Heritage Consultants 2000, *Shellharbour City Council Area Aboriginal Heritage Study*.

Navin Officer Heritage Consultants 2006, *Gerroa Sand Mine Extension: Archaeological Subsurface Testing Program*, Report for Perram and Partners on behalf of Cleary Bros (Bombo).

Navin Officer Heritage Consultants 2010, *Gerringong upgrade Princes Highway: Review of Environmental Factors Appendix G – Cultural Heritage Assessment*, Report for The Roads and Traffic Authority NSW.

Navin Officer Heritage Consultants 2012, *Foxground and Berry bypass Princes Highway upgrade Volume 2 – Appendix J Technical paper: Aboriginal heritage*, Roads and Maritime Services NSW on behalf of AECOM Australia Pty Ltd.

Navin Officer Heritage Consultants 2013, *'Berry to Bomaderry upgrade Technical paper: Aboriginal cultural heritage assessment report*, Report for the Roads and Maritime Services NSW on behalf of AECOM Australia Pty Ltd.

Navin Officer Heritage Consultants Pty Ltd 1992, *Archaeological Survey of Alternative Pipeline Easements Appin-Rosemeadow, Macarthur Water Quality Project, NSW*.

NSW Heritage Office 2001, 'Assessing heritage significance', viewed 1 May 2016, <http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/listings/assessingheritagesignificance.pdf>.

OEH 2011a, 'Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW'.

OEH 2011b, 'Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW'.

Organ, M (ed.) 1990, *A documentary history of the Illawarra & South Coast Aborigines, 1770-1850: including a chronological bibliography 1770-1990*, Aboriginal Education Unit, Wollongong University, Wollongong.

Organ, M & Speechley, C 1997, *Illawarra Aborigines - An Introductory History*, University of Wollongong, Wollongong, NSW.

Rowling, B 2010, *Sedimentary Archives of Downstream Energy Fluctuations on the Kangaroo River of NSW*, University of Wollongong, Wollongong, NSW.

Sefton, C 1980, *Aboriginal Cultural Resources Study Illawarra Region*, Report for Illawarra Regional Planning Committee.

Sefton, C 1981, *Aboriginal Cultural Resources Study Illawarra Region*, Report for National Parks and Wildlife Services.

Silcox, R 1990, *Archaeological assessment of Aboriginal and Historic sites on the proposed North Kiama bypass between Dunmore and Bombo, Kiama, NSW*, Report for Connell Wagner Pty Ltd.

Speight, JG 2009, *Landform in Australian Soil and Land Survey Field Handbook*, National Committee on Soil and Terrain, CSIRO, Collingwood.

Tindale, N 1974, *Aboriginal Tribes of Australia*, Australian National University, Canberra.

Troedson, AL & Deyssing, L 2015, 'Coastal Quaternary Mapping of the Southern Hunter to Northern Illawarra Regions, New South Wales'.

White, E. 2021. ' The survival of artefacts from different historical phases in shallow open sites and the need for spit excavations: An overview from the Cumberland Plain, Western Sydney, Australia'. *Australian Archaeology* 87(2). doi.org/10.1080/03122417.2021.1925415

APPENDICES

APPENDIX 1: CONSULTATION LOG

Organisation To	Person	Organisation From	Person	Date	Method	Notes	Location
National Native Title Tribunal		Austral	NF	16/03/2020	Email	Sent with wrong area	N/A
Jerinja Local Aboriginal Land Council		Austral	NF	16/03/2020	Email	Sent with wrong area	N/A
Shoalhaven City Council		Austral	NF	16/03/2020	Email	Sent with wrong area	N/A
South East Local Land Services		Austral	NF	16/03/2020	Email	Sent with wrong area	N/A
The Registrar		Austral	NF	16/03/2020	Email	Sent with wrong area	N/A
DPIE		Austral	NF	16/03/2020	Email	Sent with wrong area	N/A
Jerinja Local Aboriginal Land Council		Austral	NF	16/03/2020	Email	Apologies, actually in the Nowra LALC	
Jerinja LALC	Alfred Wellington	Austral	NF	16/03/2020	Email	Apologised for error on our part	
National Native Title Tribunal		Austral	NF	16/03/2020	Email	Re-sent with updated wording re. Nowra	Appendix 2a - Stage 1 Notice to Agency
Nowra Local Aboriginal Land Council		Austral	NF	16/03/2020	Email	Re-sent with updated wording re. Nowra	Appendix 2a - Stage 1 Notice to Agency
Shoalhaven City Council		Austral	NF	16/03/2020	Email	Re-sent with updated wording re. Nowra	Appendix 2a - Stage 1 Notice to Agency
South East Local Land Services		Austral	NF	16/03/2020	Email	Re-sent with updated wording re. Nowra	Appendix 2a - Stage 1 Notice to Agency
The Registrar		Austral	NF	16/03/2020	Email	Re-sent with updated wording re. Nowra	Appendix 2a - Stage 1 Notice to Agency
DPIE		Austral	NF	18/03/2020	Email	Re-sent with updated wording re. Nowra and supplyling proponents details	Appendix 2a - Stage 1 Notice to Agency
Austral	NF	Shoalhaven City Council		16/03/2020	Email	Automatic Response	Appendix 2b - Stage 1 Agency Response
Austral	NF	South East Local Land Services		16/03/2020	Email	Automatic Response	Appendix 2b - Stage 1 Agency Response
Austral	NF	DPIE		18/03/2020	Email	List of stakeholders	Appendix 2b - Stage 1 Agency Response

Badu (Murrin Clan/Peoples)	Karia Lea Bond	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Barraby Cultural Services	Lee Field	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Batemans Bay LALC		Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Biamanga (Murrin Clan/Peoples)	Seli Storer	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Bilinga (Murrin Clan/Peoples)	Simalene Carriage	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Cullendulla (Murrin Clan/Peoples)	Corey Smith	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Darug Land Obervations	Anna O'Hara	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Dharug (Murrin Clan/Peoples)	Andrew Bond	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Gadhu Dreaming	Gordon Campbell	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Goobah Development Pty Ltd (Murrin Clan/Peoples)	Basil Smith	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Gumaraa	Jodie Edwards and Lisa Bazzano	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Gundungurra Tribal Technical Services	Christopher Payne	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Gundungurra Tribal Technical Services	David Bell	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Gundungurra Tribal Technical Services	Larry Hoskins	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Gundungurra Tribal Technical Services	Peter Foster	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Gundungurra Tribal Technical Services	Pimmy Johnson Bell	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Gundungurra Tribal Technical Services	Sam Wickman	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Gundungurra Tribal Technical Services	Teangi Mereki Foster	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Gunyuu (Murrin Clan/Peoples)	Kylie Ann Bell	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Guunamma Dreaming Sites and Surveying	Richard Campbell	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Jerringong (Murrin Clan/Peoples)	Jodi Anne Stewart	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Jerrinja LALC	Alfred Wellington	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Karrial (Murrin Clan/Peoples)	Karrial Johnson	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
	Leanne Tungai	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Minnamunnung	Aaron Broad	Austral	NF	19/03/2020	Mail	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Munyunga (Murrin Clan/Peoples)	Kaya Dawn Bell	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Murramarang (Murrin Clan/Peoples)	Roxanne Smith	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Murra Bidgee Mullangari Aboriginal Corporatio	Ryan Johnson and Darleen johnson	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Murrumbul (Murrin Clan/Peoples)	Mark Henry	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Nowra LALC		Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Nundagurri (Murrin Clan/Peoples)	Newton Cariage	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Pemulwuy	Pemulwuy Johnson	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Shoalhaven Elders and Friends Organisation	Gordon Wellington	Austral	NF	19/03/2020	Mail	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
South Coast NSW Aboriginal Elders	Owen Carriage	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
South West Rocks Corporation	Edward Moran	Austral	NF	19/03/2020	Mail	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Thoorga Nura	John Carriage	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register
Three Ducks Dreaming Surveying and Consult	Leonard Wright	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitiation to Register

Tungai Tonghi	Troy Tungai	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
Ulladulla LALC		Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
Walbunja (Murrin Clan/Peoples)	Hika Te Kowhai	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
Walgalu (Murrin Clan/Peoples)	Ronald Stewart	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
Warra Bingi Nunda Gurri	Nathanial Kennedy	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
Wingikara (Murrin Clan/Peoples)	Hayley Bell	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
Wullung (Murrin Clan/Peoples)	Lee Roy James Boota	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
Yerramurra (Murrin Clan/Peoples)	Blaan Davies	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
Yurrandaali Cultural Services	Bo Field	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
	Darryl Caines	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
	Gary Caines	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
	Gayle Watts	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
	Noel Butler	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
	Noel Webster	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
	Ronald Carberry	Austral	NF	19/03/2020	Mail	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register
	Clive Freeman	Austral	HH	19/03/2020	Email	Letter requesting registration	Appendix 3 - Stage 1 Invitation to Register

DPIE & Nowra LALC		Austral	MR	17/04/2020	Email	List of registered stakeholders	Appendix 2e - Notification of stakeholders

Badu (Murrin Clan/Peoples)	Karia Lea Bond	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Barraby Cultural Services	Lee Field	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Batemans Bay LALC		Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Biamanga (Murrin Clan/Peoples)	Seli Storer	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Bilinga (Murrin Clan/Peoples)	Simalene Carriage	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Cullendulla (Murrin Clan/Peoples)	Corey Smith	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Darug Land Obervations	Anna O'Hara	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Dharug (Murrin Clan/Peoples)	Andrew Bond	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Gadhu Dreaming	Gordon Campbell	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Goobah Development Pty Ltd (Murrin Clan/Peoples)	Basil Smith	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Gumaraa	Jodie Edwards and Lisa Bazzano	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Gundungurra Tribal Technical Services	Christopher Payne	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Gundungurra Tribal Technical Services	David Bell	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Gundungurra Tribal Technical Services	Larry Hoskins	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Gundungurra Tribal Technical Services	Peter Foster	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Gundungurra Tribal Technical Services	Pimmy Johnson Bell	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Gundungurra Tribal Technical Services	Sam Wickman	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Gundungurra Tribal Technical Services	Teangi Mereki Foster	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Gunyuu (Murrin Clan/Peoples)	Kylie Ann Bell	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Guunamma Dreaming Sites and Surveying	Richard Campbell	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Jerringong (Murrin Clan/Peoples)	Jodi Anne Stewart	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Jerrinja LALC	Alfred Wellington	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Karrial (Murrin Clan/Peoples)	Karrial Johnson	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
	Leanne Tungai	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Minnamunnung	Aaron Broad	Austral	NF	17/04/2020	Mail	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Munyunga (Murrin Clan/Peoples)	Kaya Dawn Bell	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Murramarang (Murrin Clan/Peoples)	Roxanne Smith	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Murra Bidgee Mullangari Aboriginal Corporation	Ryan Johnson and Darleen johnson	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Murrumbul (Murrin Clan/Peoples)	Mark Henry	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Nowra LALC		Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Nundagurri (Murrin Clan/Peoples)	Newton Cariage	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Pemulwuy	Pemulwuy Johnson	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Shoalhaven Elders and Friends Organisation	Gordon Wellington	Austral	NF	17/04/2020	Mail	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
South Coast NSW Aboriginal Elders	Owen Carriage	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
South West Rocks Corporation	Edward Moran	Austral	NF	17/04/2020	Mail	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Thoorga Nura	John Carriage	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Three Ducks Dreaming Surveying and Consult	Leonard Wright	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Tungai Tonghi	Troy Tungai	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Ulladulla LALC		Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Walbunja (Murrin Clan/Peoples)	Hika Te Kowhai	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Walgalu (Murrin Clan/Peoples)	Ronald Stewart	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Warra Bingi Nunda Gurri	Nathanial Kennedy	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Wingikara (Murrin Clan/Peoples)	Hayley Bell	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Wullung (Murrin Clan/Peoples)	Lee Roy James Boota	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Yerramurra (Murrin Clan/Peoples)	Blaan Davies	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Yurrandaali Cultural Services	Bo Field	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
	Darryl Caines	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information

	Gary Caines	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
	Gayle Watts	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
	Noel Butler	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
	Noel Webster	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
	Ronald Carberry	Austral	NF	17/04/2020	Mail	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
	Clive Freeman	Austral	HH	17/04/2020	Email	Stage 2 and 3 letters	Appendix 4a - Stage 2 & 3 Information
Austral	HH	Yerramurra	Blaan Davies	21/04/2020	Email	Endorsing recommendations and methodology, and noting that they would like to participate in excavation	Appendix 4b - Stage 2 & 3 RAP responses
Austral	HH		Leanne Tungai	17/04/2020	Email	Confirming registration	Appendix 4b - Stage 2 & 3 RAP responses
Austral	NF		Ronald Carberry	17/04/2020	Phone	Personal phone call to confirm registration	
Austral	HH	Yurrandaali	Bo Field	22/04/2020	Email	Endorsing recommendations and methodology	Appendix 4b - Stage 2 & 3 RAP responses
Austral	HH		Gayle Watts	27/04/2020	Email	Asking if information had been sent to other stakeholders	Appendix 4b - Stage 2 & 3 RAP responses
	Gayle Watts	Austral	HH	27/04/2020	Email	Confirming all stakeholders had been sent information	Appendix 4b - Stage 2 & 3 RAP responses
Austral	HH	Barraby	Lee Field	30/04/2020	Email	Endorsing recommendations and methodology	Appendix 4b - Stage 2 & 3 RAP responses
Austral	HH	Murra Bidgee Mullangari Aboriginal Corporation	Ryan Johnson	12/05/2020	Email	Endorsing recommendations and methodology	Appendix 4b - Stage 2 & 3 RAP responses

Badu (Murrin Clan/Peoples)	Karia Lea Bond	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Barraby Cultural Services	Lee Field	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Batemans Bay LALC		Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Biamanga (Murrin Clan/Peoples)	Seli Storer	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Bilinga (Murrin Clan/Peoples)	Simalene Carriage	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Cullendulla (Murrin Clan/Peoples)	Corey Smith	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Darug Land Obervations	Anna O'Hara	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Dharug (Murrin Clan/Peoples)	Andrew Bond	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Gadhu Dreaming	Gordon Campbell	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Goobah Development Pty Ltd (Murrin Clan/Peoples)	Basil Smith	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Gumaraa	Jodie Edwards and Lisa Bazzano	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Gundungurra Tribal Technical Services	Christopher Payne	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Gundungurra Tribal Technical Services	David Bell	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Gundungurra Tribal Technical Services	Larry Hoskins	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Gundungurra Tribal Technical Services	Peter Foster	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Gundungurra Tribal Technical Services	Pimmy Johnson Bell	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Gundungurra Tribal Technical Services	Sam Wickman	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Gundungurra Tribal Technical Services	Teangi Mereki Foster	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Gunyuu (Murrin Clan/Peoples)	Kylie Ann Bell	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Guunamma Dreaming Sites and Surveying	Richard Campbell	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Jerringong (Murrin Clan/Peoples)	Jodi Anne Stewart	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Jerrinja LALC	Alfred Wellington	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Karrial (Murrin Clan/Peoples)	Karrial Johnson	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
	Leanne Tungai	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Minnamunnung	Aaron Broad	Austral	NF	15/10/2020	Mail	Project Update	Appendix 4c - Project Update
Munyunga (Murrin Clan/Peoples)	Kaya Dawn Bell	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Murramarang (Murrin Clan/Peoples)	Roxanne Smith	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Murra Bidgee Mullangari Aboriginal Corporation	Ryan Johnson and Darleen johnson	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Murrumbul (Murrin Clan/Peoples)	Mark Henry	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Nowra LALC		Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Nundagurri (Murrin Clan/Peoples)	Newton Cariage	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Pemulwuy	Pemulwuy Johnson	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Shoalhaven Elders and Friends Organisation	Gordon Wellington	Austral	NF	15/10/2020	Mail	Project Update	Appendix 4c - Project Update
South Coast NSW Aboriginal Elders	Owen Carriage	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
South West Rocks Corporation	Edward Moran	Austral	NF	15/10/2020	Mail	Project Update	Appendix 4c - Project Update
Thoorga Nura	John Carriage	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Three Ducks Dreaming Surveying and Consult	Leonard Wright	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Tungai Tonghi	Troy Tungai	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Ulladulla LALC		Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Walbunja (Murrin Clan/Peoples)	Hika Te Kowhai	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Walgalu (Murrin Clan/Peoples)	Ronald Stewart	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Warra Bingi Nunda Gurri	Nathanial Kennedy	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Wingikara (Murrin Clan/Peoples)	Hayley Bell	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update

Wullung (Murrin Clan/Peoples)	Lee Roy James Boota	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Yerramurra (Murrin Clan/Peoples)	Blaan Davies	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Yurrandaali Cultural Services	Bo Field	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
	Darryl Caines	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
	Gary Caines	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
	Gayle Watts	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
	Noel Butler	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
	Noel Webster	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
	Ronald Carberry	Austral	NF	15/10/2020	Mail	Project Update	Appendix 4c - Project Update
	Clive Freeman	Austral	HH	15/10/2020	Email	Project Update	Appendix 4c - Project Update
Austral	HH	Guunamma Dreaming Sites and Surveying	Richard Campbell	15/10/2020	Email	Confirming reciept of project update	Appendix 4d - RAP responses to update
Austral	HH		Leanne Tungai	15/10/2020	Email	Confirming reciept of project update	Appendix 4d - RAP responses to update
Austral	HH	Tungai Tonghi	Troy Tungai	16/10/2020	Email	Confirming reciept of project update and endorsement of methodology	Appendix 4d - RAP responses to update
Austral	HH	Yerramurra	Blaan Davies	16/10/2020	Email	Confirming reciept of project update	Appendix 4d - RAP responses to update

Heritage NSW		Austral	NF	18/12/2020	Email	Excavation Methodology	Appendix 4f - Notice to Heritage NSW

Minnamunnung	Aaron Broad	Austral	SP	10/05/2021	Mail	Draft ACHA report sent by post for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Shoalhaven Elders and Friends Organisation	Gordon Wellington	Austral	SP	10/05/2021	Mail	Draft ACHA report sent by post for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
South West Rocks Corporation	Edward Moran	Austral	SP	10/05/2021	Mail	Draft ACHA report sent by post for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
	Ronald Carberry	Austral	SP	10/05/2021	Mail	Draft ACHA report sent by post for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Badu (Murrin Clan/Peoples)	Karia Lea Bond	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Barraby Cultural Services	Lee Field	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Batemans Bay LALC		Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Biamanga (Murrin Clan/Peoples)	Seli Storer	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Bilinga (Murrin Clan/Peoples)	Simalene Carriage	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Cullendulla (Murrin Clan/Peoples)	Corey Smith	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Darug Land Obervations	Anna O'Hara	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Dharug (Murrin Clan/Peoples)	Andrew Bond	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Gadhu Dreaming	Gordon Campbell	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Goobah Development Pty Ltd (Murrin Clan/Peoples)	Basil Smith	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Gumaraa	Jodie Edwards and Lisa Bazzano	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Gundungurra Tribal Technical Services	Christopher Payne	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Gundungurra Tribal Technical Services	David Bell	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Gundungurra Tribal Technical Services	Larry Hoskins	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Gundungurra Tribal Technical Services	Peter Foster	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Gundungurra Tribal Technical Services	Pimmy Johnson Bell	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Gundungurra Tribal Technical Services	Sam Wickman	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Gundungurra Tribal Technical Services	Teangi Mereki Foster	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Gunyuu (Murrin Clan/Peoples)	Kylie Ann Bell	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review
Guunamma Dreaming Sites and Surveying	Richard Campbell	Austral	SP	13/05/2021	Email	Report sent by email for stakeholder review	Appendix 5a - Stage 4 Draft ACHA review

APPENDIX 2: STAGE 1 CONSULTATION DOCUMENTATION

2A: STAGE 1 AGENCY NOTICES

Our Reference: 2003
16 March 2020

National Native Title Tribunal
GPO Box 9973
Sydney NSW 2001
enquires@nntt.gov.au

Re: Aboriginal Cultural Heritage Assessment for Allen Price & Scarratts of the Proposed Development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502) Bomaderry NSW

To Whom it may concern,

I am writing to advise you that Allen Price and Scarratts has commissioned Austral Archaeology to undertake an Aboriginal cultural heritage assessment in regards to the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. The proposed works are being undertaken as part of a Review of Environmental Factors under Part 5 of the *Environmental Planning and Assessment Act 1979*. The study area is situated within the Shoalhaven City Council Local Government Area (LGA) and is located within the boundaries of the Nowra Local Aboriginal Land Council.

This project will include individuals from the Nowra Local Aboriginal Land Council and other local Aboriginal community representatives who register their interest. Aboriginal stakeholders will also be invited to register their interest through a public notice to be published in a local newspaper in accordance with the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.* Registration of interest will close 14 days after the advert appears in the newspaper. Aboriginal stakeholders may still register their interest after this date however formal consultation may commence from this time.

Placement of these public notices and advisement of the project's commencement to local councils, Catchment Management Authorities and the Registrar is a requirement under the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*. Austral Archaeology welcomes any advice and assistance your organisation may provide in identifying Aboriginal owners in the Nowra region. In particular, are you able to provide contact details for any established Aboriginal reference groups within your region?

Please do not hesitate to contact me for further information.

Yours faithfully,



Neil Fenley
Senior Archaeologist
Austral Archaeology
46 Railway Street, Liverpool, 2170
M 0429 038 258
E neilf@australarch.com.au

Our Reference: 2003
16 March 2020

Nowra Local Aboriginal Land Council
59 Beinda Street
Bomaderry
NSW 2541
nowralalc@bigpond.com

Re: Aboriginal Cultural Heritage Assessment for Allen Price & Scarratts of the Proposed Development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502) Bomaderry NSW

To Whom it may concern

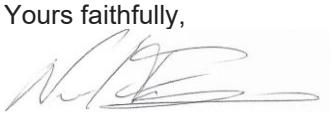
I am writing to advise you that Allen Price and Scarratts has commissioned Austral Archaeology to undertake an Aboriginal cultural heritage assessment in regards to the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. The proposed works are being undertaken as part of a Review of Environmental Factors under Part 5 of the *Environmental Planning and Assessment Act 1979*. The study area is situated within the Shoalhaven City Council Local Government Area (LGA) and is located within the boundaries of the Nowra Local Aboriginal Land Council.

This project will include individuals from the Nowra Local Aboriginal Land Council and other local Aboriginal community representatives who register their interest. Aboriginal stakeholders will also be invited to register their interest through a public notice to be published in a local newspaper in accordance with the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.* Registration of interest will close 14 days after the advert appears in the newspaper. Aboriginal stakeholders may still register their interest after this date however formal consultation may commence from this time.

Placement of these public notices and advisement of the project's commencement to local councils, Catchment Management Authorities and the Registrar is a requirement under the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*. Austral Archaeology welcomes any advice and assistance your organisation may provide in identifying Aboriginal owners in the Nowra region. In particular, are you able to provide contact details for any established Aboriginal reference groups within your region?

Please do not hesitate to contact me for further information.

Yours faithfully,



Neil Fenley
Senior Archaeologist
Austral Archaeology
46 Railway Street, Liverpool, 2170
M 0429 038 258
E neilf@australarch.com.au

Our Reference: 2003
16 March 2020

The General Manager
Shoalhaven City Council
PO Box 42
Nowra NSW 2541
council@shoalhaven.nsw.gov.au

Re: Aboriginal Cultural Heritage Assessment for Allen Price & Scarratts of the Proposed Development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502) Bomaderry NSW

To Whom it may concern,

I am writing to advise you that Allen Price and Scarratts has commissioned Austral Archaeology to undertake an Aboriginal cultural heritage assessment in regards to the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. The proposed works are being undertaken as part of a Review of Environmental Factors under Part 5 of the *Environmental Planning and Assessment Act 1979*. The study area is situated within the Shoalhaven City Council Local Government Area (LGA) and is located within the boundaries of the Nowra Local Aboriginal Land Council.

This project will include individuals from the Nowra Local Aboriginal Land Council and other local Aboriginal community representatives who register their interest. Aboriginal stakeholders will also be invited to register their interest through a public notice to be published in a local newspaper in accordance with the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.* Registration of interest will close 14 days after the advert appears in the newspaper. Aboriginal stakeholders may still register their interest after this date however formal consultation may commence from this time.

Placement of these public notices and advisement of the project's commencement to local councils, Catchment Management Authorities and the Registrar is a requirement under the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*. Austral Archaeology welcomes any advice and assistance your organisation may provide in identifying Aboriginal owners in the Nowra region. In particular, are you able to provide contact details for any established Aboriginal reference groups within your region?

Please do not hesitate to contact me for further information.

Yours faithfully,



Neil Fenley
Senior Archaeologist
Austral Archaeology
46 Railway Street, Liverpool, 2170
M 0429 038 258
E neilf@australarch.com.au

E neilf@australarch.com.au

Our Reference: 1986
16 March 2020

The General Manager
South East Local Land Services
PO Box 63
Berry NSW 2535
enquiry.southeast@lls.nsw.gov.au

Re: Aboriginal Cultural Heritage Assessment for Allen Price & Scarratts of the Proposed Development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502) Bomaderry NSW

To Whom it may concern,

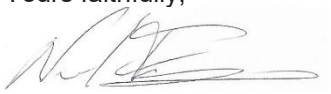
I am writing to advise you that Allen Price and Scarratts has commissioned Austral Archaeology to undertake an Aboriginal cultural heritage assessment in regards to the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. The proposed works are being undertaken as part of a Review of Environmental Factors under Part 5 of the *Environmental Planning and Assessment Act 1979*. The study area is situated within the Shoalhaven City Council Local Government Area (LGA) and is located within the boundaries of the Nowra Local Aboriginal Land Council.

This project will include individuals from the Nowra Local Aboriginal Land Council and other local Aboriginal community representatives who register their interest. Aboriginal stakeholders will also be invited to register their interest through a public notice to be published in a local newspaper in accordance with the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.* Registration of interest will close 14 days after the advert appears in the newspaper. Aboriginal stakeholders may still register their interest after this date however formal consultation may commence from this time.

Placement of these public notices and advisement of the project's commencement to local councils, Catchment Management Authorities and the Registrar is a requirement under the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*. Austral Archaeology welcomes any advice and assistance your organisation may provide in identifying Aboriginal owners in the Nowra region. In particular, are you able to provide contact details for any established Aboriginal reference groups within your region?

Please do not hesitate to contact me for further information.

Yours faithfully,



Neil Fenley
Senior Archaeologist
Austral Archaeology
46 Railway Street, Liverpool, 2170
M 0429 038 258
E neilf@australarch.com.au

Our Reference: 2003
16 March 2020

Registrar of Aboriginal Land Rights
PO Box 5068
Parramatta NSW 2124
adminofficer@oralra.nsw.gov.au

Re: Aboriginal Cultural Heritage Assessment for Allen Price & Scarratts of the Proposed Development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502) Bomaderry NSW

To Whom it may concern,

I am writing to advise you that Allen Price and Scarratts has commissioned Austral Archaeology to undertake an Aboriginal cultural heritage assessment in regards to the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. The proposed works are being undertaken as part of a Review of Environmental Factors under Part 5 of the *Environmental Planning and Assessment Act 1979*. The study area is situated within the Shoalhaven City Council Local Government Area (LGA) and is located within the boundaries of the Nowrainja Local Aboriginal Land Council.

This project will include individuals from the Nowrainja Local Aboriginal Land Council and other local Aboriginal community representatives who register their interest. Aboriginal stakeholders will also be invited to register their interest through a public notice to be published in a local newspaper in accordance with the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.* Registration of interest will close 14 days after the advert appears in the newspaper. Aboriginal stakeholders may still register their interest after this date however formal consultation may commence from this time.

Placement of these public notices and advisement of the project's commencement to local councils, Catchment Management Authorities and the Registrar is a requirement under the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*. Austral Archaeology welcomes any advice and assistance your organisation may provide in identifying Aboriginal owners in the Nowrainja region. In particular, are you able to provide contact details for any established Aboriginal reference groups within your region?

Please do not hesitate to contact me for further information.

Yours faithfully,



Neil Fenley
Senior Archaeologist
Austral Archaeology
46 Railway Street, Liverpool, 2170
M 0429 038 258
E neilf@australarch.com.au

Our Reference: 2003
18 March 2020

South East Branch
Department of Premier and Cabinet
Planning and Aboriginal Heritage Section
PO Box 514
Wollongong NSW 2520
Rose.OSullivan@environment.nsw.gov.au

Re: Aboriginal Cultural Heritage Assessment for Allen Price & Scarratts of the Proposed Development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502) Bomaderry NSW

Dear Rose,

I am writing to advise you that Allen Price and Scarratts has commissioned Austral Archaeology to undertake an Aboriginal cultural heritage assessment in regards to the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry**,** New South Wales. The proposed works are being undertaken as part of a Review of Environmental Factors under Part 5 of the *Environmental Planning and Assessment Act 1979*. The study area is situated within the Shoalhaven City Council Local Government Area (LGA) and is located within the boundaries of the Nowra Local Aboriginal Land Council.

This project will include individuals from the Nowra Local Aboriginal Land Council and other local Aboriginal community representatives who register their interest. Aboriginal stakeholders will also be invited to register their interest through a public notice to be published in a local newspaper in accordance with the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.* Registration of interest will close 14 days after the advert appears in the newspaper. Aboriginal stakeholders may still register their interest after this date however formal consultation may commence from this time.

Placement of these public notices and advisement of the project's commencement to local councils, Catchment Management Authorities and the Registrar is a requirement under the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*. Austral Archaeology welcomes any advice and assistance your organisation may provide in identifying Aboriginal owners in the Nowra region. In particular, are you able to provide contact details for any established Aboriginal reference groups within your region?

The proponents contact details are
James Harris,
Town Planner
Allen Price & Scarratts Pty Ltd
75 Plunkett Street,
Nowra, NSW 2541
Phone 02 4421 6544

Please do not hesitate to contact me for further information.

Yours faithfully,



Neil Fenley
Senior Archaeologist
Austral Archaeology
46 Railway Street, Liverpool, 2170
M 0429 038 258

2B: STAGE 1 AGENCY RESPONSES

NSW GOVERNMENT | Planning, Industry & Environment

18 March 2020

Neil Fenley
Austral Archaeology Pty Ltd
46 Railway Street
Liverpool NSW 2170

By email: neilf@australarch.com.au

Dear Neil

REQUEST FOR INFORMATION ABOUT POTENTIAL ABORIGINAL STAKEHOLDERS AS REQUIRED UNDER OEH ABORIGINAL CULTURAL HERITAGE CONSULTATION REQUIREMENTS FOR PROPONENTS 2010

RE: 25 Moss Vale Road Bomaderry

Thank you for your request received on 18 March 2020 regarding the above matter. Attached is a list of known Aboriginal parties for the Shoalhaven Local Government Area. The Department of Planning, Industry and Environment believes these groups and individuals are likely to have an interest in the project.

The consultation process involves getting the views of, and information from, Aboriginal people and reporting on these. It is not to be confused with other field assessment processes involved in preparing a proposal and a permit application. Consultation does not include the employment of Aboriginal people to assist in field assessment and/or site monitoring. Aboriginal people may provide services to proponents through a contractual arrangement, however, this is separate from consultation. The proponent is not obliged to employ those Aboriginal people registered for consultation. Consultation as per the requirements will continue irrespective of potential or actual employment opportunities for Aboriginal people.

This list is not necessarily an exhaustive list of all interested Aboriginal parties and does not remove the requirement of a proponent or consultant to advertise in local print media and contact other groups in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (April 2010).

The contact details in the attached list are provided solely for the purpose of contacting people about this project. The contact details must remain private and must not be reproduced in publicly available reports or other documents.

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

Please note that the contact details in the list provided by the Department may be out of date as the list relies on Aboriginal parties advising the Department when their details need changing. If you are aware of any incorrect contact details on the list please contact the Department. AHIP applicants should make a note of any group they are unable to contact as part of their consultation record.

If you wish to discuss any of the above matters further please contact Rose O'Sullivan on 4224 4177 or Rose.O'Sullivan@environment.nsw.gov.au.

Yours sincerely



Chris Page
Senior Team Leader Planning (Illawarra)
South East Branch
Biodiversity and Conservation Division
Department of Planning, Industry and Environment

Enclosures: Attachment 1: Shoalhaven LGA Stakeholder List

Attachment 1: Shoalhaven LGA Stakeholder List

Organisation/ Name	Contact Person	Postal Address	Phone number; email	Notes
Badu (Murrin Clan/Peoples)	Karia Lea Bond	11 Jeffery Place, Moruya, NSW 2537	Mobile Phone: 0476381207; email: baduchts@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Barraby Cultural Services	Lee Field	6 Macgibbon Parade, Old Erowal Bay NSW 2540	Email: barrabyculturalservices@gmail.com Mobile: 0423 906 606	
Batemans Bay Local Aboriginal Land Council		PO Box 542, Batemans Bay NSW 2536	Ph: (02) 4472 7390 Fax: (02) 4472 8622	
Biamanga (Murrin Clan/Peoples)	Seli Storer		Email: biamangachts@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Bilinga (Murrin Clan/Peoples)	Simalene Carriage		Email: bilingachts@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Individual	Noel Butler		Mobile Phone: 0405 646 911 Email: nuragunyu@gmail.com	
Individual	Darryl Caines	11/17-19 Grove Circuit Lake Illawarra 2528	Mobile Phone: 0413 822 804 Email: darrylcaines8@gmail.com	
Individual	Gary Caines	28 Gowan Brae Avenue, Mt Ousley, NSW 2519	Ph:(02) 4227 2690; Email: grc04@live.com.au and garycaines87@gmail.com	
Individual	Ronald Carberry	13 Roseby Park ORIENT POINT NSW	Mobile Phone: 0421 822 443	
Cullendulla (Murrin Clan/Peoples)	Corey Smith		Email: cullendullachts@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Darug Land	Anna O'Hara	PO Box 2006 Bendelong	Email: daruglandobservations@gmail.com	

Organisation/ Name	Contact Person	Postal Address	Phone number; email	Notes
Observations		NSW 2539		
Dharug (Murrin Clan/Peoples)	Andrew Bond		Email: dharugchts@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Individual	Clive Freeman	6 Dhugan Close Wreck Bay Aboriginal Community JBT 2540	Email:clive.freeman@y7mail.com Telephone: 44421117 Mobile Phone: 0437 721 481	
Gadhu Dreaming	Gordon Campbell		Email: gordy2540@hotmail.com Mobile: 0401342364	
Goobah Development PTY LTD (Murrin Clan/Peoples)	Basil Smith	66 Grantham Road Batehaven NSW 2536	Mob: 0405995725; email: bunjilsmith@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Gundungurra Tribal Technical Services	David Bell	67 Dickens Road, AMBERVALE NSW 2560	Mob: 0450 124 891 Email: gundungurratectribsevices@gmail.com	
Gumaraa	Jodie Edwards and Lisa Bazzano		Mobile Phone: 0487 406 782 Email: oldmanwisdomgumaraa@gmail.com	
Gundungurra Tribal Technical Services	Pimmy Johnson Bell	67 Dickens Road, AMBERVALE NSW 2560	Mob: 0425 066 100 Email: gundungurratectribsevices@gmail.com	
Gundungurra Tribal Technical Services	Peter Foster	4 Tuppal Way, AIRDS NSW 2560	Mob: 0432 590 289 Email: gundungurratectribsevices@gmail.com	
Gundungurra Tribal Technical Services	Teangi Mereki Foster	1/6 Central Avenue, OEK FLATS NSW 2529	Mob: 0420 978 969 Email: gundungurratectribsevices@gmail.com	
Gundungurra Tribal Technical Services	Larry Hoskins	2/3 Colville Place, ROSEMEADOW NSW 2560	Mob: 0478 009 879 Email: gundungurratectribsevices@gmail.com	
Gundungurra Tribal Technical Services	Christopher Payne	9/15-22 Burns Road, LEUMEAH NSW 2560	Mob: 0466 975 437 Email: gundungurratectribsevices@gmail.com	

Organisation/ Name	Contact Person	Postal Address	Phone number; email	Notes
Gundungurra Tribal Technical Services	Sam Wickman		Email: gundungurratectribsevices@gmail.com	
Gunyuu (Murrin Clan/Peoples)	Kylie Ann Bell		Email: gunyuuchts@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Guunamaa Dreamin Sites and Surveying	Richard Campbell	2 Minda Crescent Oak Flats NSW 2529	Email: richardcampbell123@outlook.com; Mobile phone 0432 645 912	
Jerringong (Murrin Clan/Peoples)	Jodi Anne Stewart	2/10 Burnett Avenue Gerringong NSW 2534	Mob: 0422 800 184; Email: jerringong@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Jerrinja Local Aboriginal Land Council	CEO: Alfred Wellington	PO Box 167 CULBURRA BEACH NSW 2540	Ph: 4447 4355 Email: jlalc@bigpond.com and jlalc17@gmail.com	
Karrial (Murrin Clan/Peoples)	Karrial Johnson		Email: karrialchts@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Minnamunnung	Aaron Broad	1 Waratah Avenue ALBION PARK RAIL NSW 2527	Mob: 0402 526 888 (do not publish)	
Munyunga (Murrin Clan/Peoples)	Kaya Dawn Bell		Email: munyungachts@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Murramarang (Murrin Clan/Peoples)	Roxanne Smith		Email: murramarangchts@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Murra Bidgee Mullangari Aboriginal Corporation	Ryan Johnson and Darleen Johnson		Mobile (Ryan): 0475 565 517 Mobile (Darlene): 0490 051 102 Email: murrabidgeemullangari@yahoo.com.au	
Murrumbul (Murrin Clan/Peoples)	Mark Henry		Email: murrumbul@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Nowra Local Aboriginal Land Council		PO Box 528 Nowra NSW 2541 59 Belinda St Bomaderry NSW 2542	Ph: 02 44233163 Email: nowralalc@bigpond.com	
Nundagurri (Murrin Clan/Peoples)	Newton Carriage		Email: nundagurri@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Pemulwuy (Murrin	Pemulwuy Johnson		Email: pemulwuyd@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River

Organisation/ Name	Contact Person	Postal Address	Phone number; email	Notes
Clan/Peoples)				
Shoalhaven Elders and Friends Organisation	Chairperson: Gordon Wellington	1 Roma Close, Bomaderry, NSW 2541	Ph: (02) 44233182	
South Coast NSW Aboriginal Elders	Owen Carriage		Email: owen.fpfs@gmail.com Mobile Phone: 0400 917 653	
South West Rocks Corporation	Edward Moran (Director)	4 Crystal Place South West Rocks NSW 2431	Mobile 0499 281 456	
Thoorga Nura	John Carriage	50B Hilltop Crescent, Surfbeach, NSW 2536	Email: thoorganura@gmail.com Mobile Phone: 0401 641 299	
Three Ducks Dreaming Surveying and Consulting	Leonard Wright	40 Tuggerah Circuit FLINDERS 2529	Ph: 0422 382 950 Email: lbjwright1977@hotmail.com	
Tungai Tonghi	Troy Tungai	10 Paterson Place Barrack Heights 2528	Email: troytungai72@outlook.com Mobile Phone: 0423 350 430	
Individual	Leanne Tungai		Email: leannecaroltungai@gmail.com Mobile Phone: 0478157604	
Ulladulla Local Aboriginal Land Council		66 Deering Street, P.O. Box 520 ULLADULLA NSW 2539	Ph: 4455 5883 Fax: 4454 0440 Email: admin@ulladullalalc.com.au and ulladulla@internode.on.net.au	
Walbunja (Murrin Clan/Peoples)	Hika Te Kowhai	15 Renee Crescent Moruya Heads NSW 2537	Mob: 0402 730 612; email: Walbunja@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Walgalu (Murrin Clan/Peoples)	Ronald Stewart		Email: walgaluchts@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Warra Bingi Nunda Gurri	Nathanial Kennedy		Mobile Phone: 0406 924 258 Email: warrabingi@gmail.com	
Individual	Gayle Watts		Email: gayle.w@hotmail.com Mobile: 0403 172 694	
Individual	Noel Webster	20 Peacehaven Way, Sussex Inlet, NSW, 2540	Email: noelwebster2@bigpond.com	
Wingikara (Murrin Clan/Peoples)	Hayley Bell		Email: wingikarachts@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River

Organisation/ Name	Contact Person	Postal Address	Phone number; email	Notes
Wullung (Murrin Clan/Peoples)	Lee-Roy James Boota	54 Blackwood Street Gerringong NSW 2534	Mob: 0403 703 942; Email: wullunglb@gmail.com	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Yerramurra (Murrin Clan/Peoples)	Blaan Davis		Email: bd875@uow.edu.au Mobile Phone: 0413 208 344	This group states that their boundaries (Murrin Peoples) extend from the Hawkesbury River to the Snowy River
Yurrandaali Cultural Services	Bo Field	3 Sheeran street, Old Erowal Bay NSW 2540	Email: yurrandaali_cs@outlook.com; Mobile: 0457 546 643	

From:	Council Email
To:	Neil Fenley
Subject:	Shoalhaven City Council - Your email has been received.
Date:	Monday, 16 March 2020 2:14:47 PM

Thank you for contacting Shoalhaven City Council.

Your email has been received and will be referred to the appropriate Council Officer and Section for action.

Please note this email has been generated automatically and does not require a response.

Meanwhile you may care to visit https://shoalhaven.nsw.gov.au for further information regarding Council activities and services. Your email may take a while to process so if the matter is urgent, please call Council during business hours on 02 4429 3111 or after hours on 02 4421 3100.

Shoalhaven City Council
02 4429 3111
Bridge Rd (PO Box 42) Nowra NSW 2541
council@shoalhaven.nsw.gov.au
https://shoalhaven.nsw.gov.au/

This message may contain both confidential and privileged information intended only for the addressee named above.
If you have received this email in error, please notify the sender immediately then destroy the original message.

From:	Rose O"Sullivan
To:	Neil Fenley
Subject:	RE: HPE CM: 25 Moss Vale Road
Date:	Wednesday, 18 March 2020 5:46:47 PM
Attachments:	image006.jpg image007.png image008.png image009.png image010.png image011.png DPIE response - 25 Moss Vale Road Bomaderry - Austral.pdf

Hi Neil

Thanks for providing the proponent's contact details. Please see our list attached. (As this is the same LGA the list is the same as the one I just emailed for Sussex Inlet).

Regards
Rose

Rose O'Sullivan
Archaeologist

South East Branch (Illawarra) | Biodiversity and Conservation | Department of Planning, Industry and Environment
T 02 4224 4177 | **M** 0429 152 180 | **E** Rose.OSullivan@environment.nsw.gov.au
84 Crown Street, Wollongong 2520, PO Box 514 Wollongong NSW 2520
www.dpie.nsw.gov.au

I acknowledge the traditional custodians of country throughout Australia and recognise their continuing connection to land, waters and community.

PLEASE NOTE OUR CHANGED POSTAL ADDRESS. OUR NEW POSTAL ADDRESS IS **PO BOX 514** WOLLONGONG, NSW, 2520

From: Neil Fenley <neilf@australarch.com.au>
Sent: Wednesday, 18 March 2020 4:08 PM
To: Rose O'Sullivan <Rose.OSullivan@environment.nsw.gov.au>
Subject: HPE CM: 25 Moss Vale Road

Hi Rose,
Here is the updated letter for the Moss Vale Road project with the proponents details included.

Cheers Neil

Neil Fenley
Senior Archaeologist

From:	En uiry SouthEast
To:	Neil Fenley
Subject:	our email has een received. Re: A original Cultural Heritage Assessment
Date:	Monday, 16 March 2020 2:19:12 PM

Thank you for your email.

Please note: Our Customer & Administration Team are currently providing support to the NSW Bushfire Disaster Relief Centres. If a response is required, a Customer & Administration Officer will endeavour to respond your request within 5 business days.

If your matter is urgent, **please call 1300 795 299** during business hours to speak with your local office.

If you suspect an exotic animal disease please contact the Emergency Animal Disease hotline on 1800 675 888

If you suspect a plant health issue please contact the Exotic Plant Pest hotline on 1800 084 881

If your property has been fire affected and require emergency fodder and water please contact the Agriculture and Animal Services hotline on 1800 814 647.

Stay up-to-date with advice, information, events and project updates from South East Local Land Services by signing up to our e-newsletter.

DOC18 50626 2018 email brand footer

--
Kind regards,

Customer & Administration Officer
South East Local Land Services
E: enquiry.southeast@lls.nsw.gov.au
T: Bega 6491 7800
Berry 4464 6000
Braidwood 4842 2594
Cooma 6455 7200
Goulburn 4824 1900
Yass 6118 7700
W: www.southeast.lls.nsw.gov.au/

ease rate our ser ce

oca an Ser ces s comm tte to ro n e ce ent customer ser ce

Fee bac s e come an anon mous Shou ou sh to ro e ee bac to he us m ro e ease c c here: rateitnow.com/southeastllsregion

Stay up-to-date with advice, information, events and project updates from South East Local Land Services

by signing up to our e-newsletter.



This message is intended for the addressee named and may contain confidential information. If you are not the intended recipient, please delete it and notify the sender. Views expressed in this message are those of the individual sender, and are not necessarily the views of their organisation.

2C: STAGE 1 NOTICE TO POTENTIAL STAKEHOLDERS

To: Admin@australarch.com.au

Bcc: baduchts@gmail.com; barrabyculturalservices@gmail.com; biamangachts@gmail.com; bilingachts@gmail.com; cullendullachts@gmail.com; daruglandobserva ons@gmail.com; dharugchts@gmail.com; gordy2540@hotmail.com; bunjilsmith@gmail.com; oldmanwisdomgumaraa@gmail.com; gundungurratectribservices@gmail.com; gundungurratectribservices@gmail.com; gundungurratectribservices@gmail.com; gundungurratectribservices@gmail.com; gundungurratectribservices@gmail.com; gundungurratectribservices@gmail.com; gunyuuchts@gmail.com; richardcampbell123@outlook.com; jerringong@gmail.com; jlalc@bigpond.com; jlalc17@gmail.com; karrialchts@gmail.com; leannecaroltungai@gmail.com; minnamunnungchts@gail.com; munyungachts@gmail.com; murramarangchts@gmail.com; murrabidgeemullangari@yahoo.com.au; murrambul@gmail.com; nowralalc@bigpond.com; nundagurri@gmail.com; pemulwuy@gmail.com; owen.fpfs@gmail.com; thoorganura@gmail.com; lbjwright1977@hotmail.com; troytungai72@outlook.com; admin@ulladullalal.com.au; ulladulla@internode.com.au; walbunja@gmail.com; walgaluchts@gmail.com; warrabingi@gmail.com; wingikarachts@gmail.com; wullunglb@gmail.com; bd875@uow.edu.au; yurrandaali_cs@outlook.com; darrylcaines8@gmail.com; grc04@live.com.au; garycaines87@gmail.com; gayle.w@hotmail.com; nuragunyu@gmail.com; noelwebster2@bigpond.com; clive.freeman@y7mail.com

Subject: Expressions of interest for 25 Moss Vale Road Aboriginal Cultural Heritage Assessment

To Whom it may concern,

I am writing to advise you that Allen Price and Scarratts has commissioned Austral Archaeology to undertake an Aboriginal cultural heritage assessment in regard to the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. The proposed works are being undertaken as part of a Review of Environmental Factors under Part 5 of the Environmental Planning and Assessment Act 1979. The study area is situated within the Shoalhaven City Council Local Government Area (LGA) and is located within the boundaries of the Nowra Local Aboriginal Land Council.

On behalf of the proponent Austral wishes to consult Aboriginal people as part of a cultural heritage assessment which may result in an Aboriginal Heritage Impact Permit (AHIP). Consultation is required to assist the Director General of the Department of Premier and Cabinet (DPC) in his or her consideration of the application. Consultation will be completed in accordance with the OEH's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010. Parties with cultural knowledge relevant to the significance of Aboriginal object(s) and or place(s) are invited to register their interest by 2 April 2020. More information will be provided after registration.

The registration period will close on **2 April 2020**. Aboriginal stakeholders may still register their interest after this date however formal consultation may commence from this time. To register your interest in this project, please contact me on the details below.

For your information, the proponent for this project is James Harris, Town Planner, Allen Price and Scarratts Pty Ltd, 75 Plunkett Street, Nowra, NSW 2541. He can be contacted on 02 4421 6544 or jamesharris@allenprice.com.au.

Please do not hesitate to contact me for further information.

Kind Regards,

Hayley Hunter
Operations Manager

M: 0418 973 444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

AUSTRAL
ARCHAEOLOGY

Reference: 2109
19 March 2020

Ronald Carberry
13 Roseby Park
Orient Point NSW 2540

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT: 25 MOSS VALE ROAD, BOMADERRY, NEW SOUTH WALES

I am writing to advise you that Allen Price and Scarratts has commissioned Austral Archaeology to undertake an Aboriginal cultural heritage assessment in regard to the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. The proposed works are being undertaken as part of a Review of Environmental Factors under Part 5 of the *Environmental Planning and Assessment Act 1979*. The study area is situated within the Shoalhaven City Council Local Government Area (LGA) and is located within the boundaries of the Nowra Local Aboriginal Land Council.

On behalf of the proponent Austral wishes to consult Aboriginal people as part of a cultural heritage assessment which may result in an Aboriginal Heritage Impact Permit (AHIP). Consultation is required to assist the Director General of the Department of Premier and Cabinet (DPC) in his or her consideration of the application.

Consultation will be completed in accordance with the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*. Parties with cultural knowledge relevant to the significance of Aboriginal object(s) and or place(s) are invited to register their interest by 2 April 2020. More information will be provided this date however formal consultation may commence from this time. To register your interest in this project, please contact me on the details below.

For your information, the proponent for this project is James Harris, Town Planner, Allen Price and Scarratts Pty Ltd, 75 Plunkett Street, Nowra, NSW 2541. He can be contacted on 02 4421 6544 or jamesharris@allenprice.com.au. Please do not hesitate to contact me for further information.

Please do not hesitate to contact me on 0429 038 258 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

Reference: 2109
19 March 2020

Southwest Rocks Corporation
Edward Moran
4 Crystal Place
South West RocksNSW 2431

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT: 25 MOSS VALE ROAD, BOMADERRY, NEW SOUTH WALES

I am writing to advise you that Allen Price and Scarratts has commissioned Austral Archaeology to undertake an Aboriginal cultural heritage assessment in regard to the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. The proposed works are being undertaken as part of a Review of Environmental Factors under Part 5 of the *Environmental Planning and Assessment Act 1979*. The study area is situated within the Shoalhaven City Council Local Government Area (LGA) and is located within the boundaries of the Nowra Local Aboriginal Land Council.

On behalf of the proponent Austral wishes to consult Aboriginal people as part of a cultural heritage assessment which may result in an Aboriginal Heritage Impact Permit (AHIP). Consultation is required to assist the Director General of the Department of Premier and Cabinet (DPC) in his or her consideration of the application.

Consultation will be completed in accordance with the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*. Parties with cultural knowledge relevant to the significance of Aboriginal object(s) and or place(s) are invited to register their interest by 2 April 2020. More information will be provided this date however formal consultation may commence from this time. To register your interest in this project, please contact me on the details below.

For your information, the proponent for this project is James Harris, Town Planner, Allen Price and Scarratts Pty Ltd, 75 Plunkett Street, Nowra, NSW 2541. He can be contacted on 02 4421 6544 or jamesharris@allenprice.com.au. Please do not hesitate to contact me for further information.

Please do not hesitate to contact me on 0429 038 258 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

Reference: 2109
19 March 2020

Shoalhaven Elders and Friends Organisation
Gordon Wellington
1 Roma Close
Bomaderry Rocks NSW 2541

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT: 25 MOSS VALE ROAD, BOMADERRY, NEW SOUTH WALES

I am writing to advise you that Allen Price and Scarratts has commissioned Austral Archaeology to undertake an Aboriginal cultural heritage assessment in regard to the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. The proposed works are being undertaken as part of a Review of Environmental Factors under Part 5 of the *Environmental Planning and Assessment Act 1979*. The study area is situated within the Shoalhaven City Council Local Government Area (LGA) and is located within the boundaries of the Nowra Local Aboriginal Land Council.

On behalf of the proponent Austral wishes to consult Aboriginal people as part of a cultural heritage assessment which may result in an Aboriginal Heritage Impact Permit (AHIP). Consultation is required to assist the Director General of the Department of Premier and Cabinet (DPC) in his or her consideration of the application.

Consultation will be completed in accordance with the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*. Parties with cultural knowledge relevant to the significance of Aboriginal object(s) and or place(s) are invited to register their interest by 2 April 2020. More information will be provided this date however formal consultation may commence from this time. To register your interest in this project, please contact me on the details below.

For your information, the proponent for this project is James Harris, Town Planner, Allen Price and Scarratts Pty Ltd, 75 Plunkett Street, Nowra, NSW 2541. He can be contacted on 02 4421 6544 or jamesharris@allenprice.com.au. Please do not hesitate to contact me for further information.

Please do not hesitate to contact me on 0429 038 258 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

Reference: 2109
19 March 2020

Minnamunnung
Aaron Broad
1 Waratah Avenue
Albion Park Rail NSW 2527

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT: 25 MOSS VALE ROAD, BOMADERRY, NEW SOUTH WALES

I am writing to advise you that Allen Price and Scarratts has commissioned Austral Archaeology to undertake an Aboriginal cultural heritage assessment in regard to the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. The proposed works are being undertaken as part of a Review of Environmental Factors under Part 5 of the *Environmental Planning and Assessment Act 1979*. The study area is situated within the Shoalhaven City Council Local Government Area (LGA) and is located within the boundaries of the Nowra Local Aboriginal Land Council.

On behalf of the proponent Austral wishes to consult Aboriginal people as part of a cultural heritage assessment which may result in an Aboriginal Heritage Impact Permit (AHIP). Consultation is required to assist the Director General of the Department of Premier and Cabinet (DPC) in his or her consideration of the application.

Consultation will be completed in accordance with the OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*. Parties with cultural knowledge relevant to the significance of Aboriginal object(s) and or place(s) are invited to register their interest by 2 April 2020. More information will be provided this date however formal consultation may commence from this time. To register your interest in this project, please contact me on the details below.

For your information, the proponent for this project is James Harris, Town Planner, Allen Price and Scarratts Pty Ltd, 75 Plunkett Street, Nowra, NSW 2541. He can be contacted on 02 4421 6544 or jamesharris@allenprice.com.au. Please do not hesitate to contact me for further information.

Please do not hesitate to contact me on 0429 038 258 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

2E: NOTICE TO HERITAGE NSW AND LALC OF REGISTERED STAKEHOLDERS

Reference: 2109

17 April 2020

To whom this may concern,

RE: LIST OF REGISTERED STAKEHOLDERS FOR 25 MOSS VALE ROAD ACHA

Please find below the list of registered stakeholders for 25 Moss Vale Road Aboriginal Cultural Heritage Assessment. If you have any questions do not hesitate to contact me.

Table 1 List of Registered Aboriginal stakeholders.

Organisation	Contact person
Badu (Murrin Clan/Peoples)	Karia Lea Bond
Barraby Cultural Services	Lee Field
Batemans Bay Local Aboriginal Land Council	Colin Davis
Biamanga (Murrin Clan/Peoples)	Seli Storer
Bilinga (Murrin Clan/Peoples)	Simalene Carriage
-	Noel Butler
-	Darryl Caines
-	Gary Caines
-	Ronald Carberry
Cullendulla (Murrin Clan/Peoples)	Corey Smith
Darug Land Observations	Anna O'Hara
Dharug (Murrin Clan/Peoples)	Andrew Bond
Gadhu Dreaming	Gordon Campbell
Goobah Development PTY LTD (Murrin Clan/Peoples)	Basil Smith
Gundungurra Tribal Technical Services	David Bell
Gumaraa	Jodie Edwards
Gumaraa	Lisa Bazzano
Gundungurra Tribal Technical Services	Pimmy Johnson Bell
Gundungurra Tribal Technical Services	Peter Foster
Gundungurra Tribal Technical Services	Teangi Mereki Foster
Gundungurra Tribal Technical Services	Larry Hoskins

Organisation	Contact person
Gundungurra Tribal Technical Services	Christopher Payne
Gundungurra Tribal Technical Services	Sam Wickman
Gunyuu (Murrin Clan/Peoples)	Kylie Ann Bell
Guunamaa Dreamin Sites and Surveying	Richard Campbell
Jerringong (Murrin Clan/Peoples)	Jodi Anne Stewart
Jerrinja Local Aboriginal Land Council	Alfred Wellington
Karrial (Murrin Clan/Peoples)	Karrial Johnson
Minnamunnung	Aaron Broad
Munyunga (Murrin Clan/Peoples)	Kaya Dawn Bell
Murramarang (Murrin Clan/Peoples)	Roxanne Smith
Murra Bidgee Mullangari Aboriginal Corporation	Ryan Johnson
Murra Bidgee Mullangari Aboriginal Corporation	Darleen Johnson
Murrumbul (Murrin Clan/Peoples)	Mark Henry
Nowra Local Aboriginal Land Council	Alfred Wellington
Nundagurri (Murrin Clan/Peoples)	Newton Carriage
Pemulwuy (Murrin Clan/Peoples)	Pemulwuy Johnson
Shoalhaven Elders and Friends Organisation	Gordon Wellington
South Coast NSW Aboriginal Elders	Owen Carriage
South West Rocks Corporation	Edward Moran
Thoorga Nura	John Carriage
Three Ducks Dreaming Surveying and Consulting	Leonard Wright
Tungai Tonghi	Troy Tungai
-	Leanne Tungai
Walbunja (Murrin Clan/Peoples)	Hika TeKowhai
Walgalu (Murrin Clan/Peoples)	Ronald Stewart
Warra Bingi Nunda Gurri	Nathanial Kennedy
-	Gayle Watts
-	Noel Webster
Wingikara (Murrin Clan/Peoples)	Hayley Bell
Wullung (Murrin Clan/Peoples)	Lee-Roy James Boota
Yerramurra (Murrin Clan/Peoples)	BlaanDavis
Yurrandaali Cultural Services	BoField

© 2020 Austral Archaeology Pty Ltd / info@australarch.com.au / www.australarchaeology.com.au

Yours sincerely,



Miles Robson
Senior Archaeologist
Austral Archaeology Pty Ltd
ABN: 55 629 860 975
M: 0411 842 200
E: milesr@australarch.com.au

2D: STAGE 1 RAP REGISTRATIONS

APPENDIX 3: STAGE 1 NEWSPAPER ADVERT

25 Moss vale road, Bomaderry, NSW.

Aboriginal Cultural Heritage Assessment –Registration of Interest.

James Harris on behalf of Allen price & scarratts pty ltd has commissioned Austral Archaeology Pty Ltd (Austral) to undertake an Aboriginal Cultural Heritage Assessment (ACHA) in regard to the proposed subdivision of the land at situated at 25, Moss Vale Road, Bomaderry, NSW, defined by the boundary of Lot 1, DP520502, Lot 110, DP131219, and Lot 129, DP3060.

On behalf of the proponent, Austral wishes to consult Aboriginal people to assist with a cultural heritage assessment which may result in an Aboriginal Heritage Impact Permit (AHIP). Consultation is required to assist the Director General of the Department of Premier and Cabinet (DPC) in his or her consideration of the application. Consultation will be in accordance with the DPC's Consultation Requirements 2010. Parties with cultural knowledge relevant to the significance of Aboriginal object(s) andr place(s) are invited to register their interest by 2 April 2020. More information about the project will be provided after registration.

For more information please contact:

James Harris
Town Planner
allen price & scarratts pty ltd
75, Plunkett Street, Nowra,
NSW, 2541

(02) 44216544

jamesharris@allenprice.com.au

To register, please contact
Austral Archaeology Pty Ltd
Neil Fenley 1/148, Tongarra Road, Albion Park, NSW, 2527

0429038258

neilf@australarch.com.au

Registration closes 2/04/2020.

APPENDIX 4: STAGE 2 AND STAGE 3 CONSULTATION DOCUMENTATION AND PROJECT UPDATES

4A: STAGE 2 & 3 PROJECT INFORMATION AND METHODS

From:	Hayley Hunter
To:	barrabyculturalservices@gmail.com
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Lee Field
NSW
Dear Lee,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

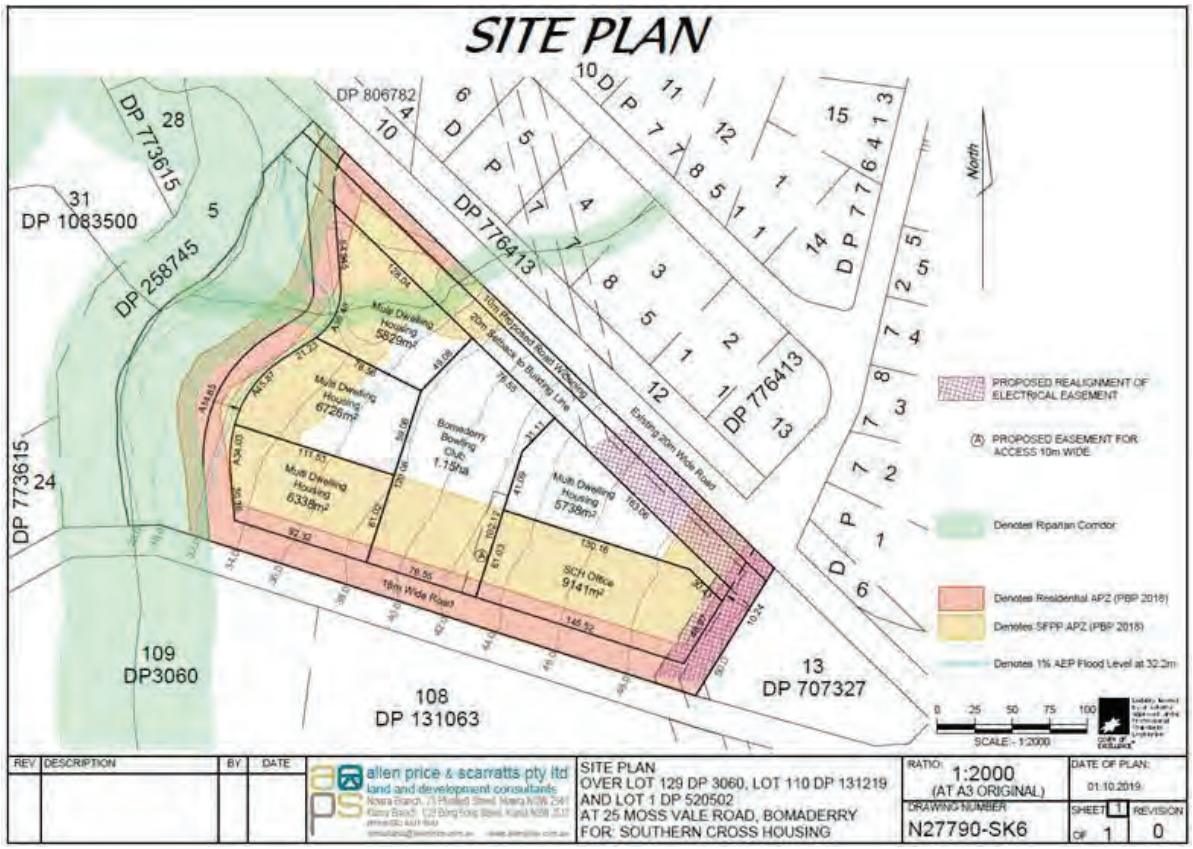


Figure 2. Proposed Development

From:	Hayley Hunter
To:	bblalc@bigpond.com
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Colin Davis
NSW
Dear Colin,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

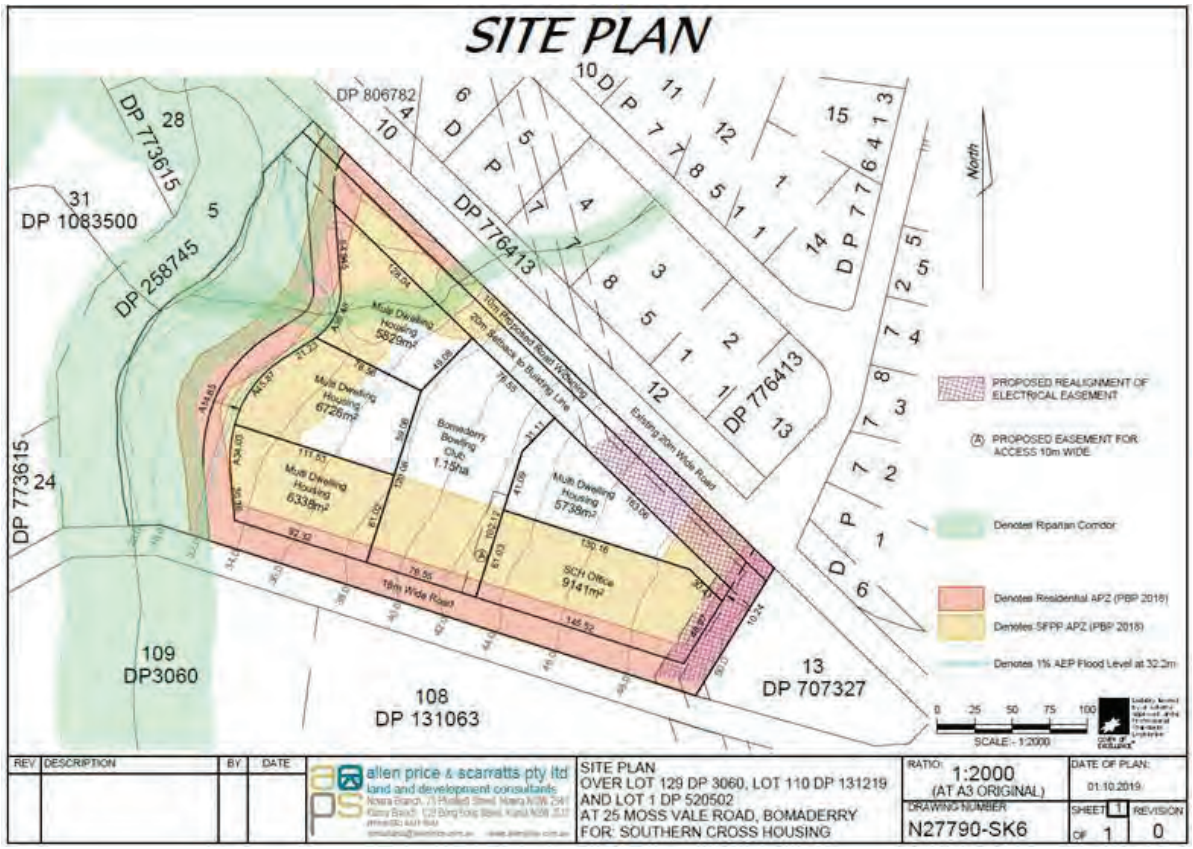


Figure 2. Proposed Development

From:	Hayley Hunter
To:	biamangachts@gmail.com
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Seli Storer
Dear Seli,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

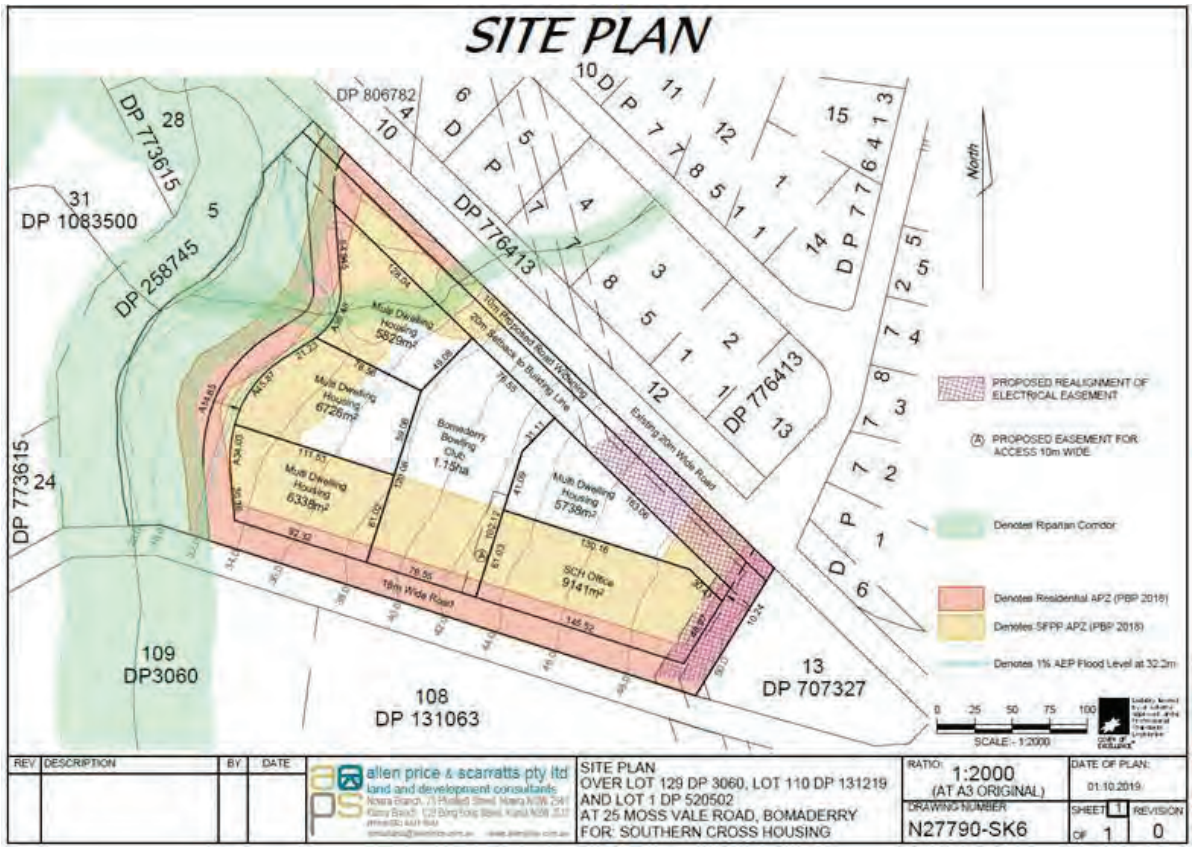


Figure 2. Proposed Development

From:	Hayley Hunter
To:	"daruglandobservations@gmail.com"
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Anna O'Hara
NSW
Dear Anna,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

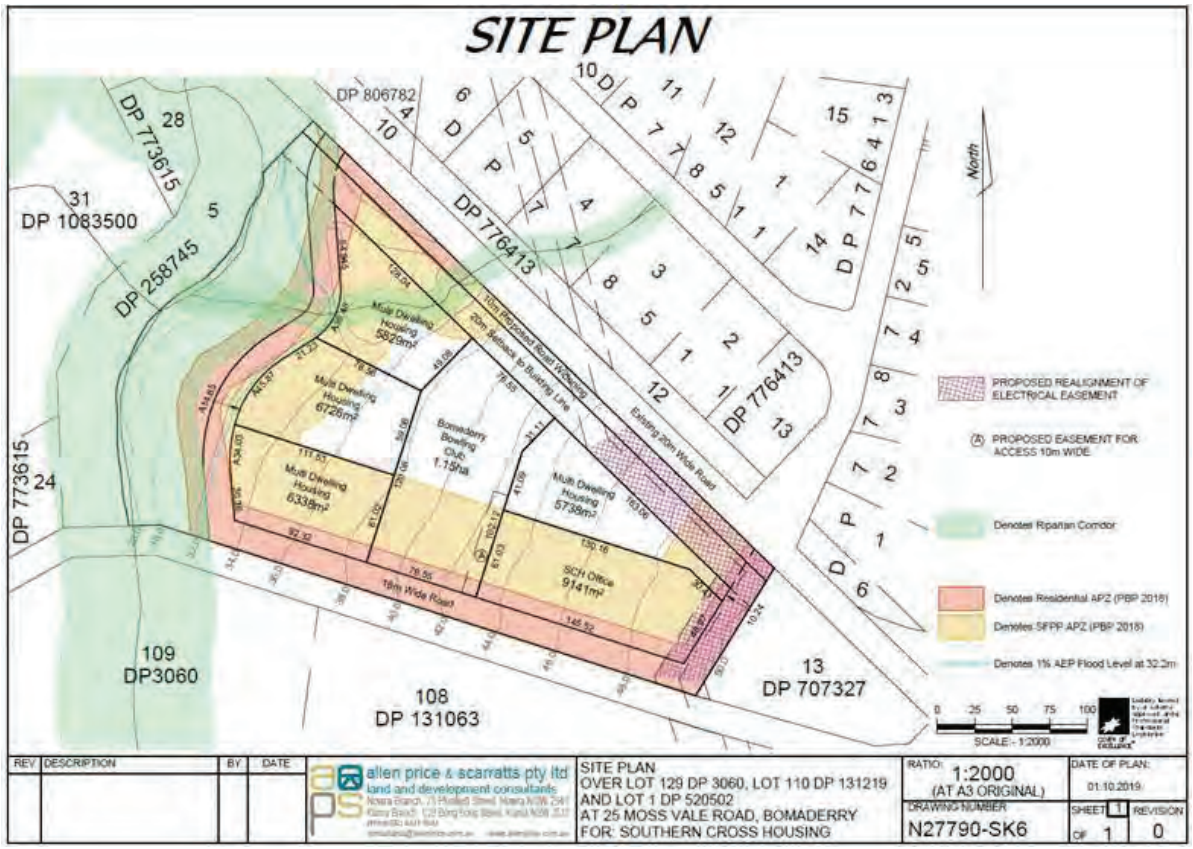


Figure 2. Proposed Development

From: Hayley Hunter
To: gordy2540@hotmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:43:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Gordon Campbell
Dear Gordon,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

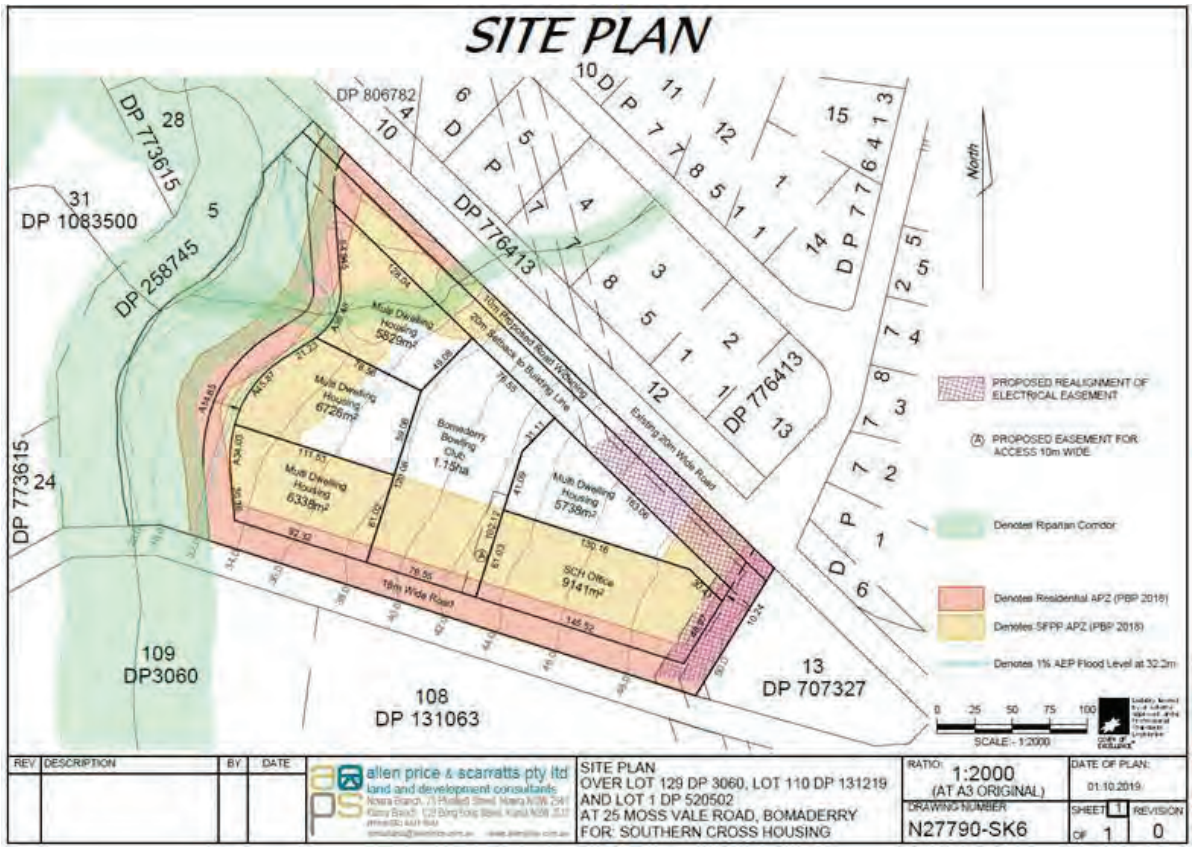


Figure 2. Proposed Development

From:	Hayley Hunter
To:	bunjilsmith@gmail.com
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Basil Smith
NSW
Dear Basil,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

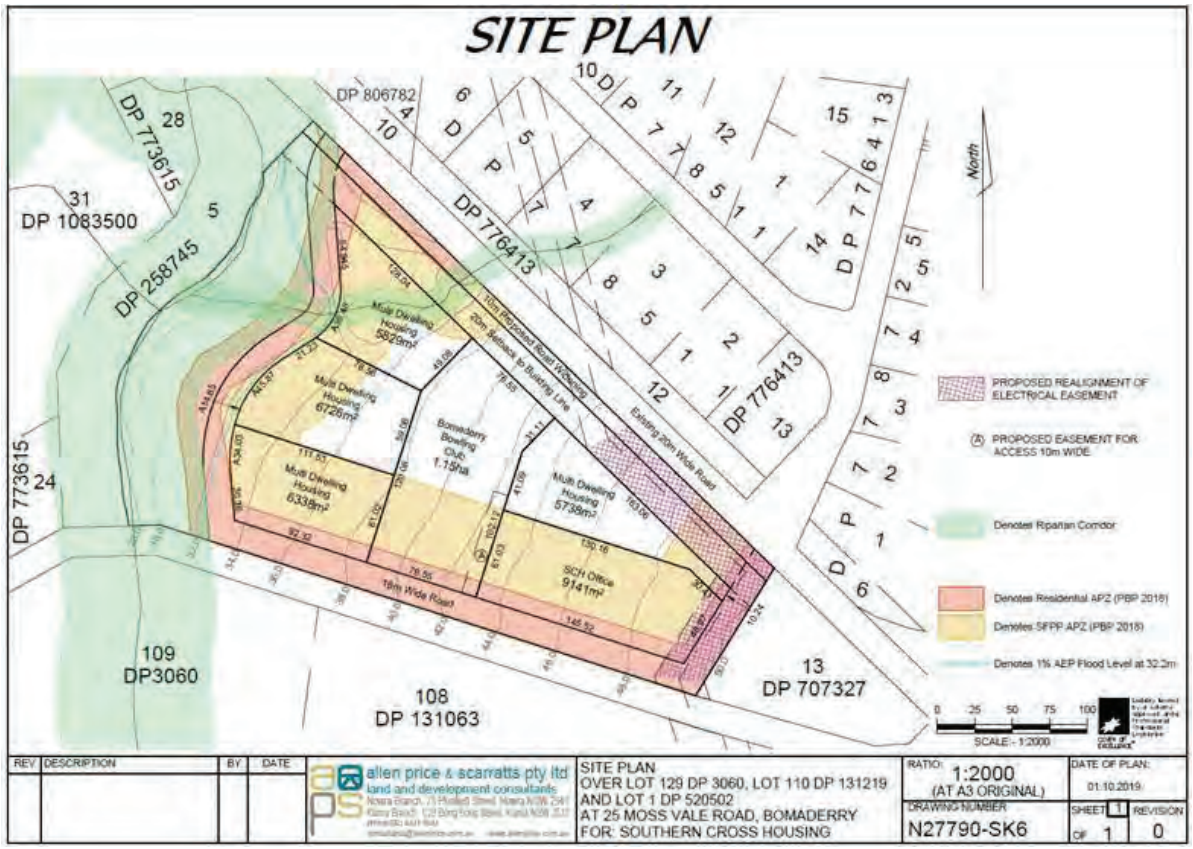


Figure 2. Proposed Development

From:	Hayley Hunter
To:	gundungurratectribsevices@gmail.com
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

David Bell
NSW
Dear David,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

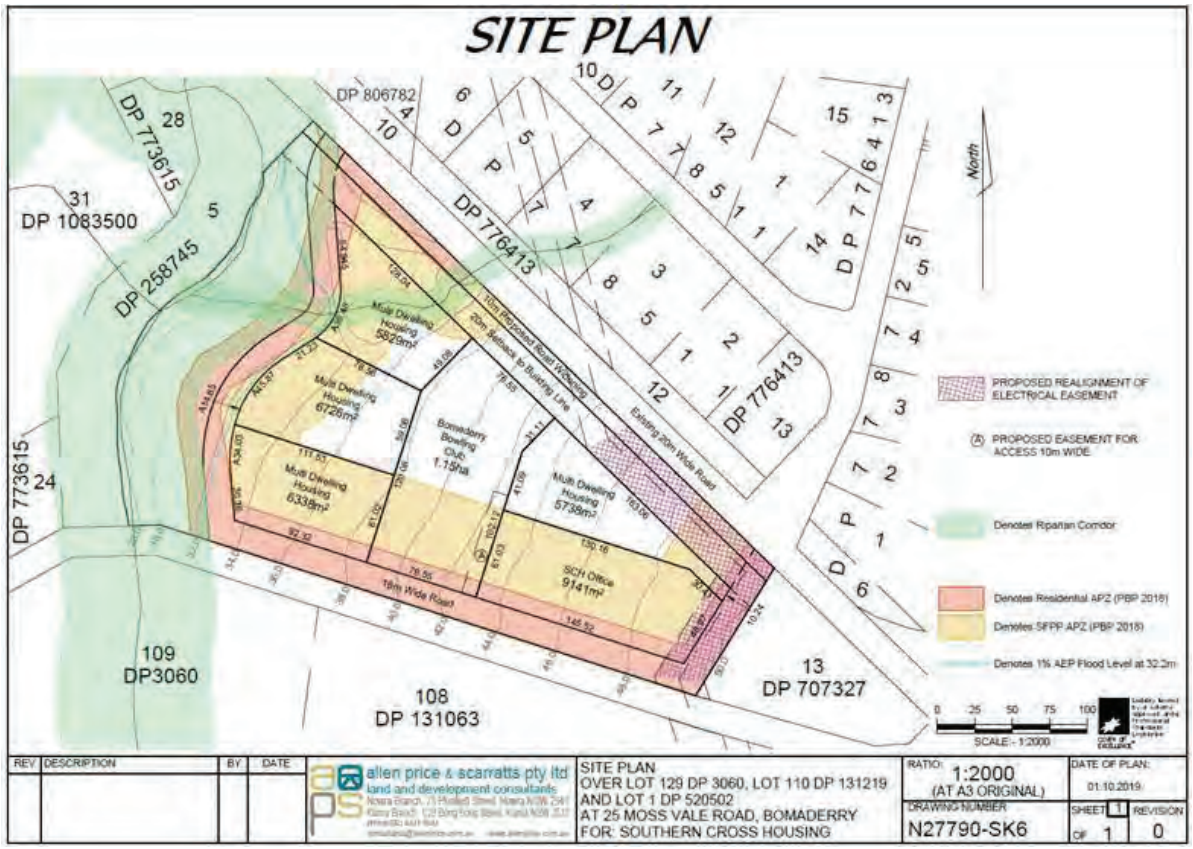


Figure 2. Proposed Development

From:	Hayley Hunter
To:	oldmanwisdomgumaraa@gmail.com
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Lisa Bazzano
Dear Lisa,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

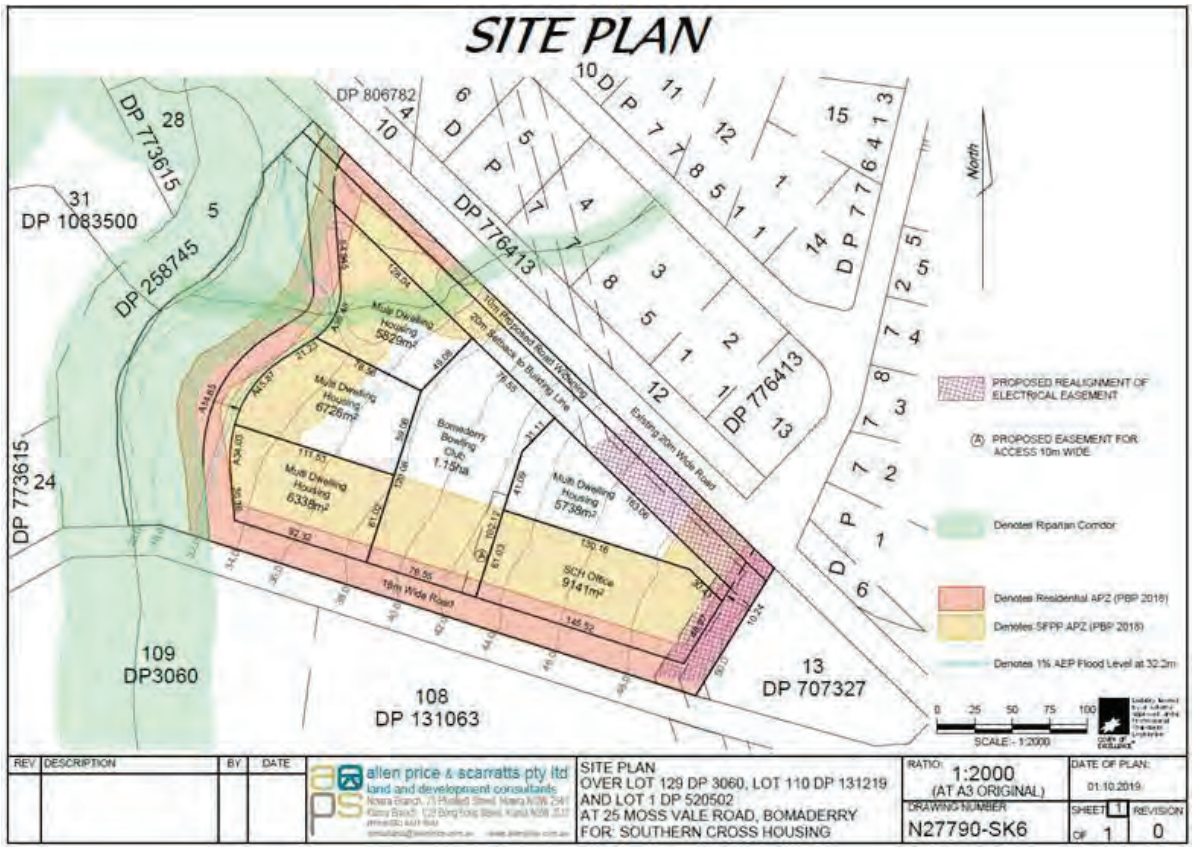


Figure 2. Proposed Development

From: Hayley Hunter
To: oldmanwisdomgumaraa@gmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:43:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Jodie Edwards
Dear Jodie,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

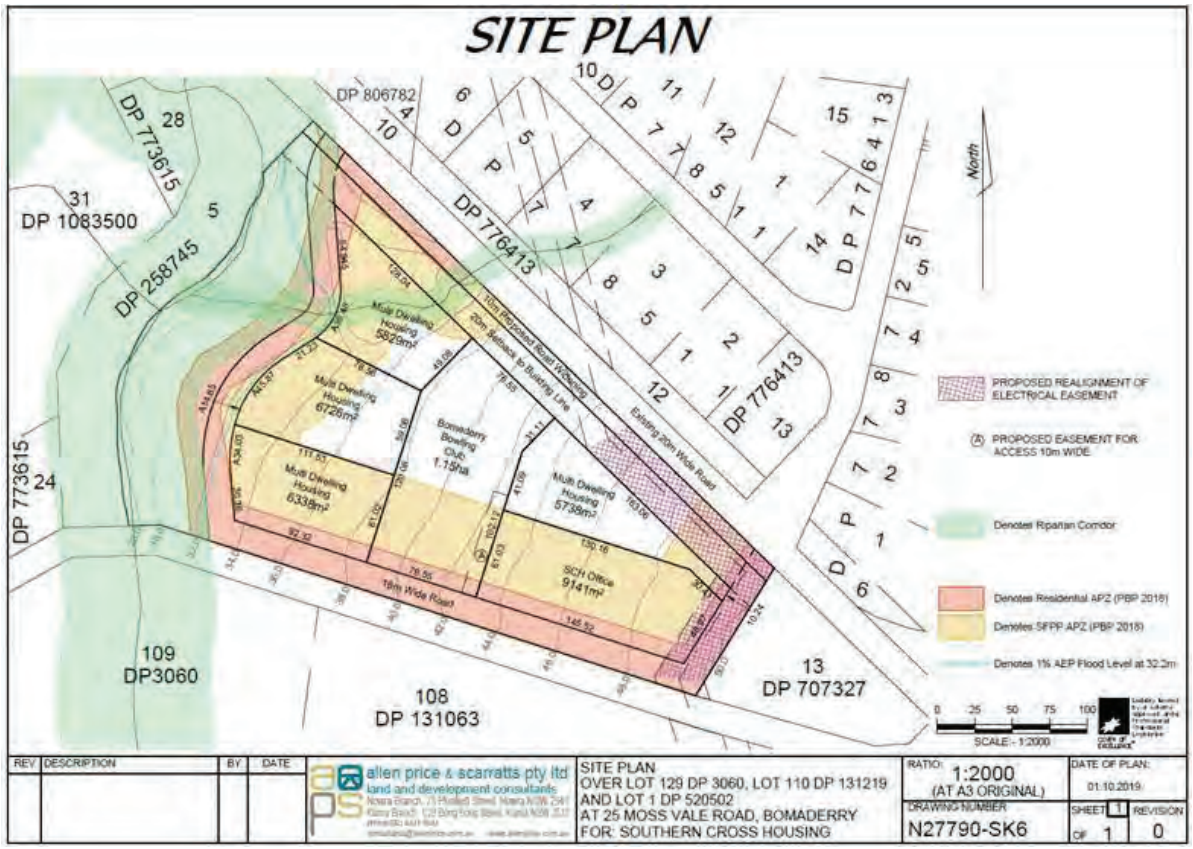


Figure 2. Proposed Development

From: Hayley Hunter
To: "gundungurratectribsevices@gmail.com"
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:43:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Pimmy Johnson Bell
NSW
Dear Pimmy,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

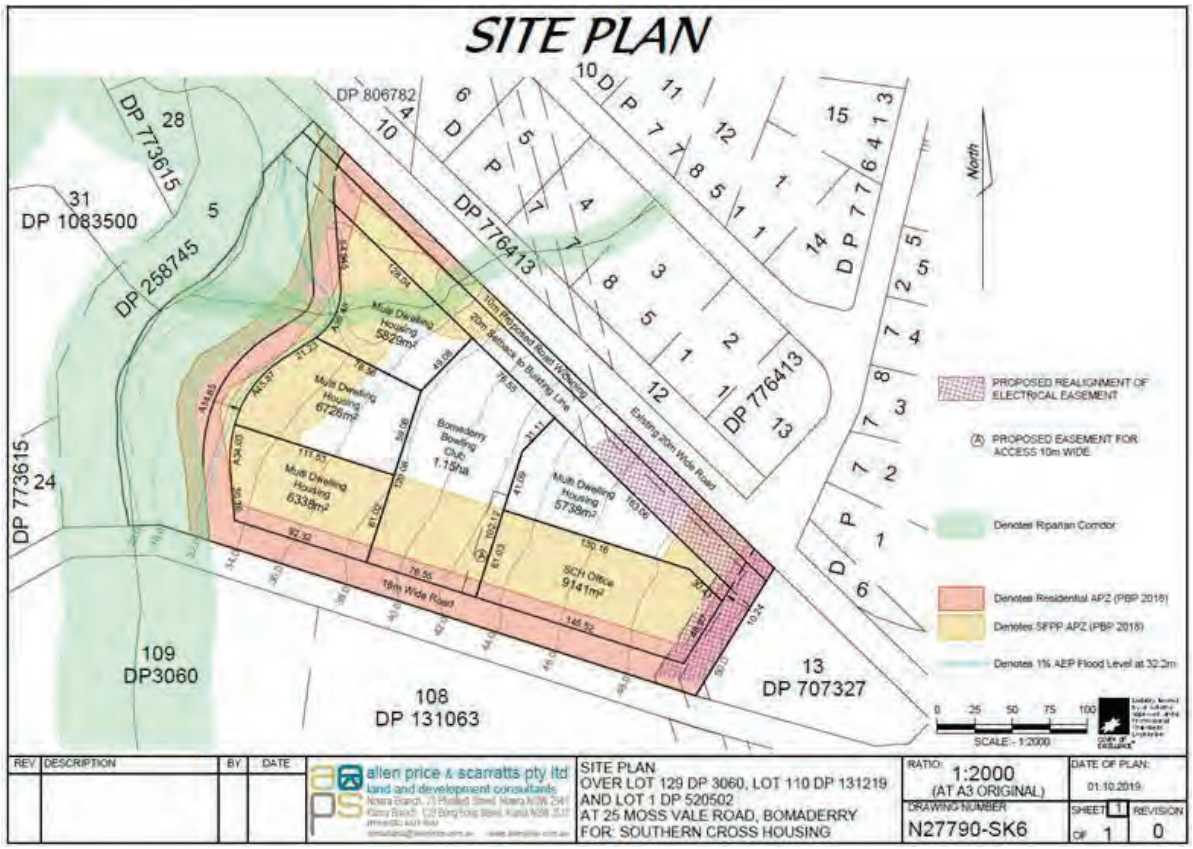


Figure 2. Proposed Development

From:	Hayley Hunter
To:	"gundungurratectribsevices@gmail.com"
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Peter Foster
NSW
Dear Peter,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

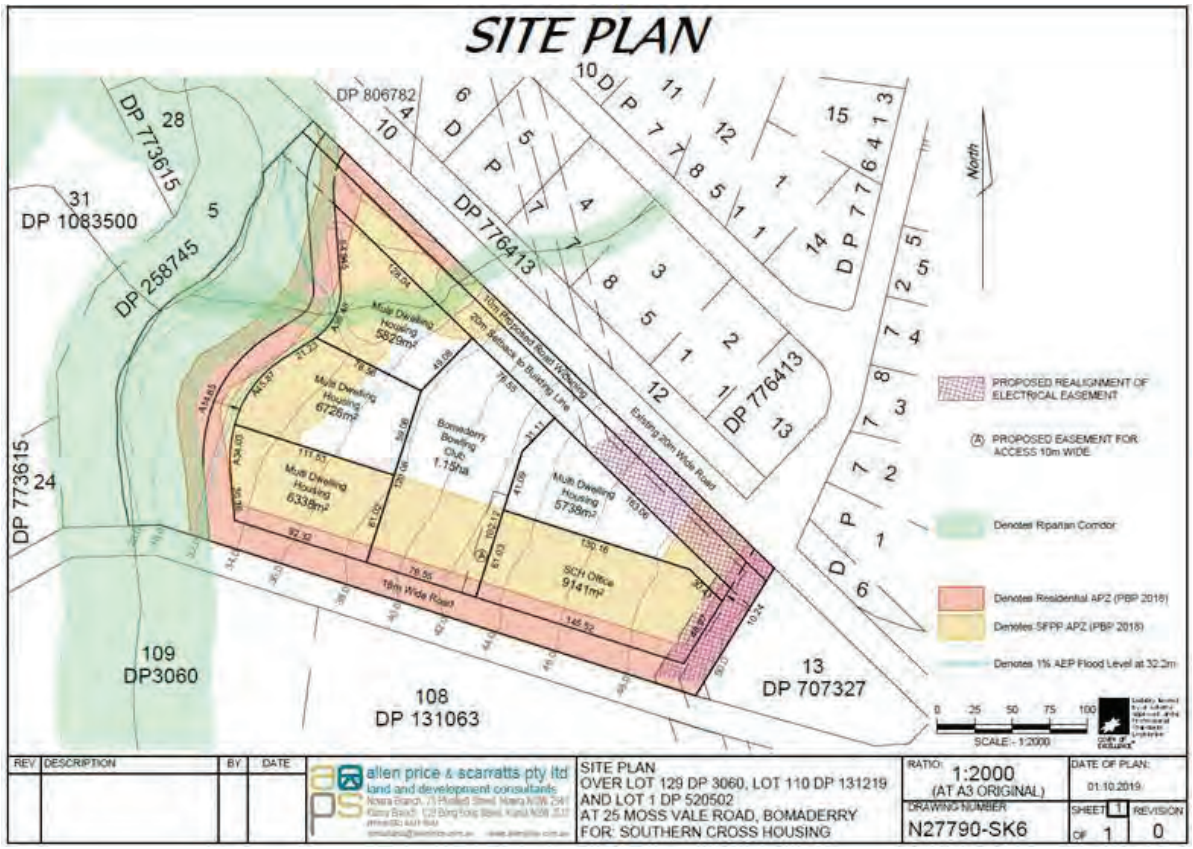


Figure 2. Proposed Development

From:	Hayley Hunter
To:	gundungurratectribsevices@gmail.com
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Teangi Mereki Foster
NSW
Dear Teangi Mereki,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

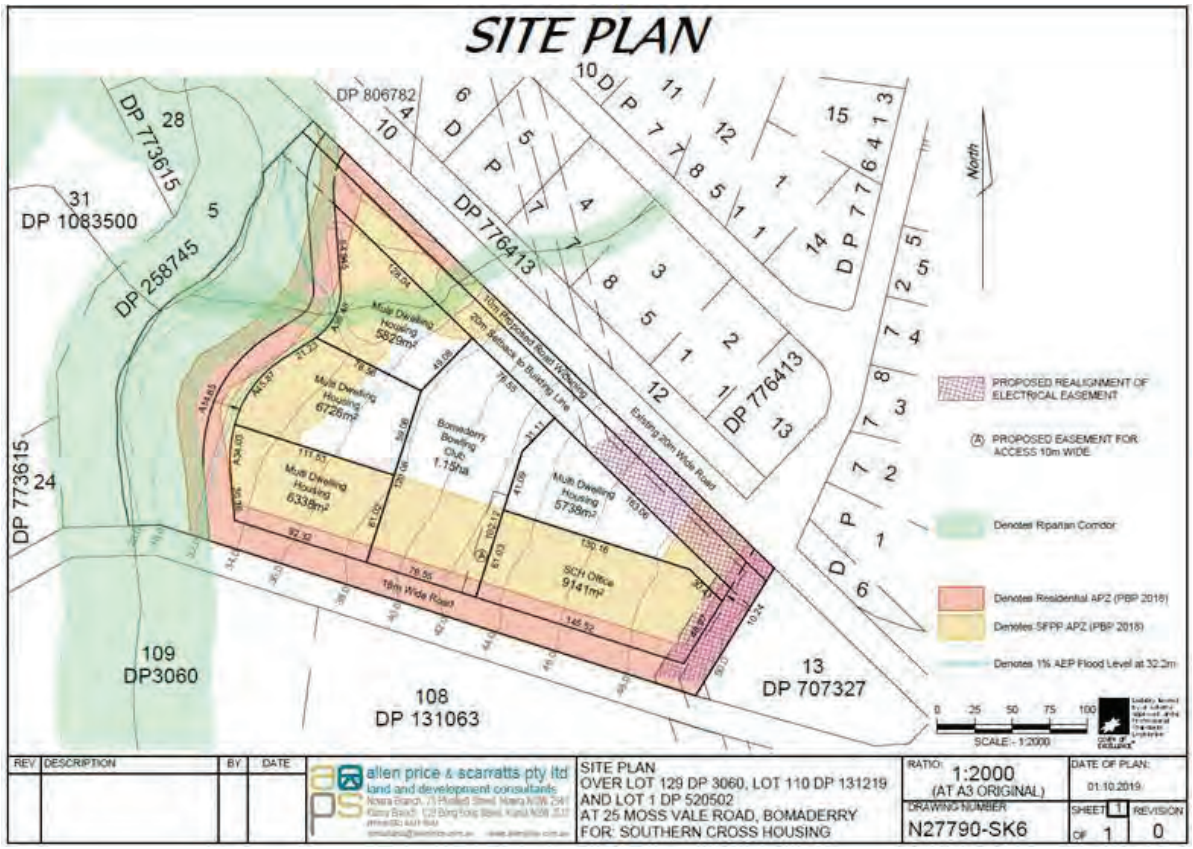


Figure 2. Proposed Development

From: Hayley Hunter
To: gundungurratectribsevices@gmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:43:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Larry Hoskins
NSW
Dear Larry,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

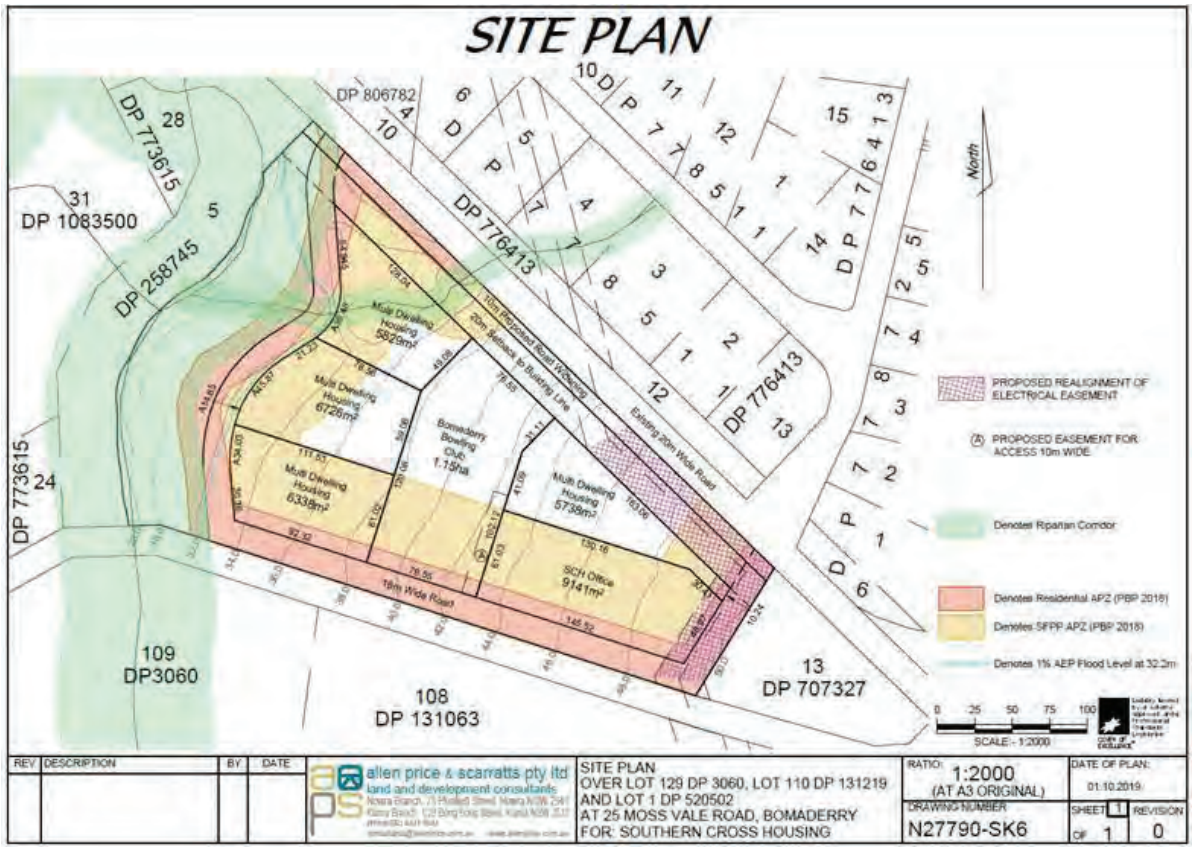


Figure 2. Proposed Development

From: Hayley Hunter
To: gundungurratectribsevices@gmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:43:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Christopher Payne
NSW
Dear Christopher,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

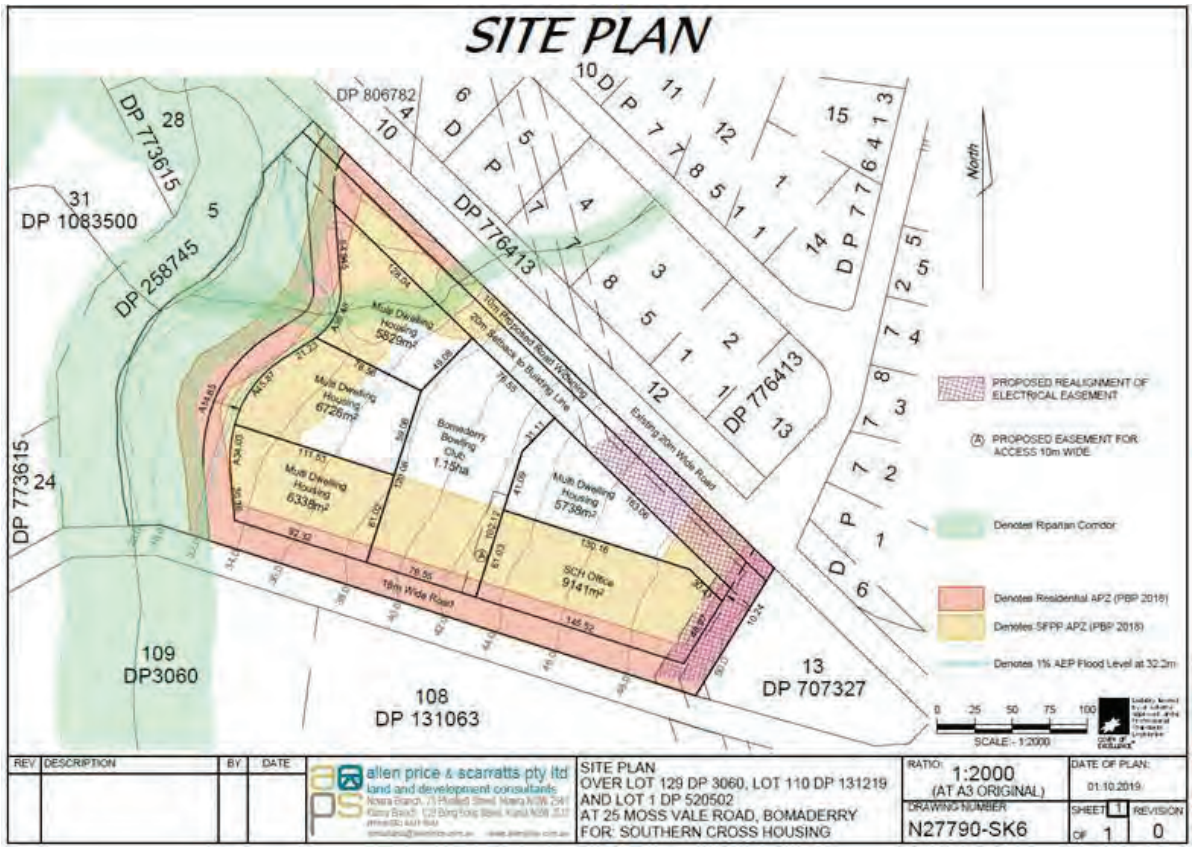


Figure 2. Proposed Development

From: Hayley Hunter
To: gundungurratectribsevices@gmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:43:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Sam Wickman
Dear Sam,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

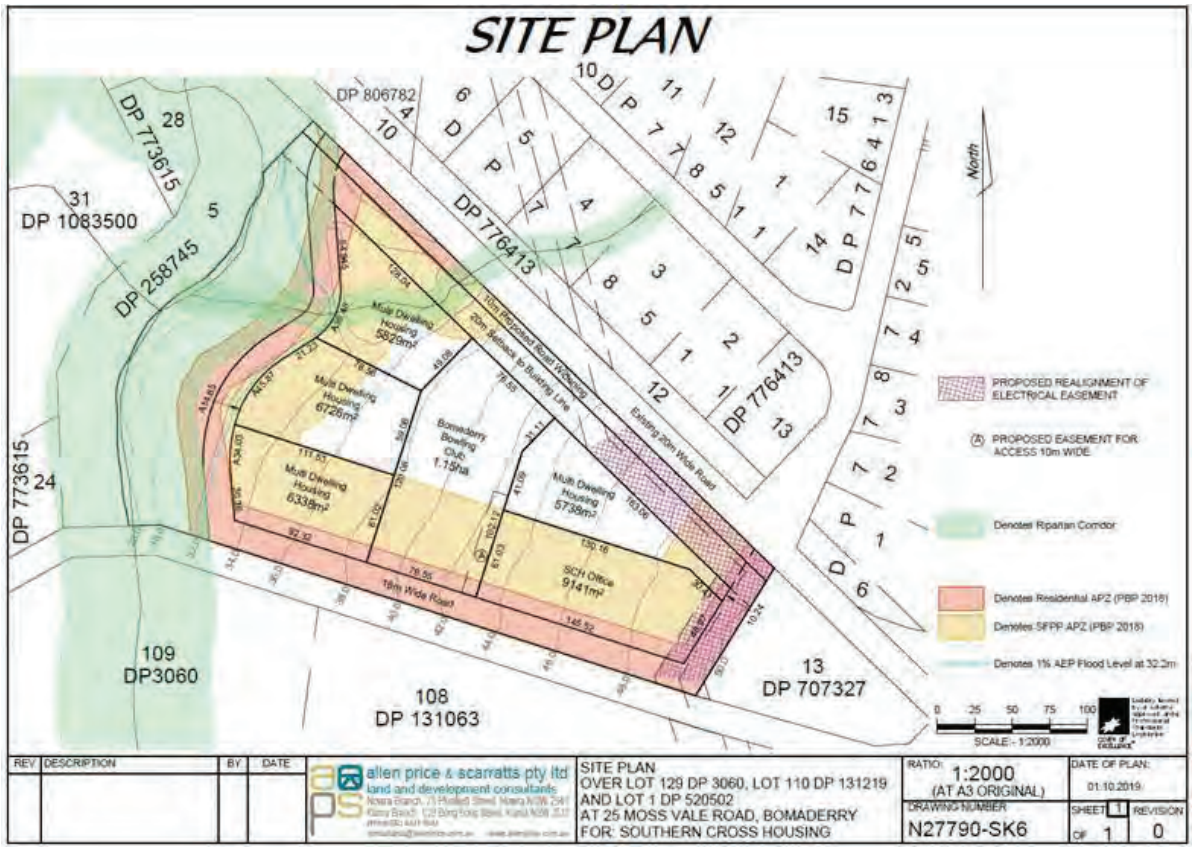


Figure 2. Proposed Development

From:	Hayley Hunter
To:	"gunyuuchts@gmail.com"
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Kylie Ann Bell
Dear Kylie Ann,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

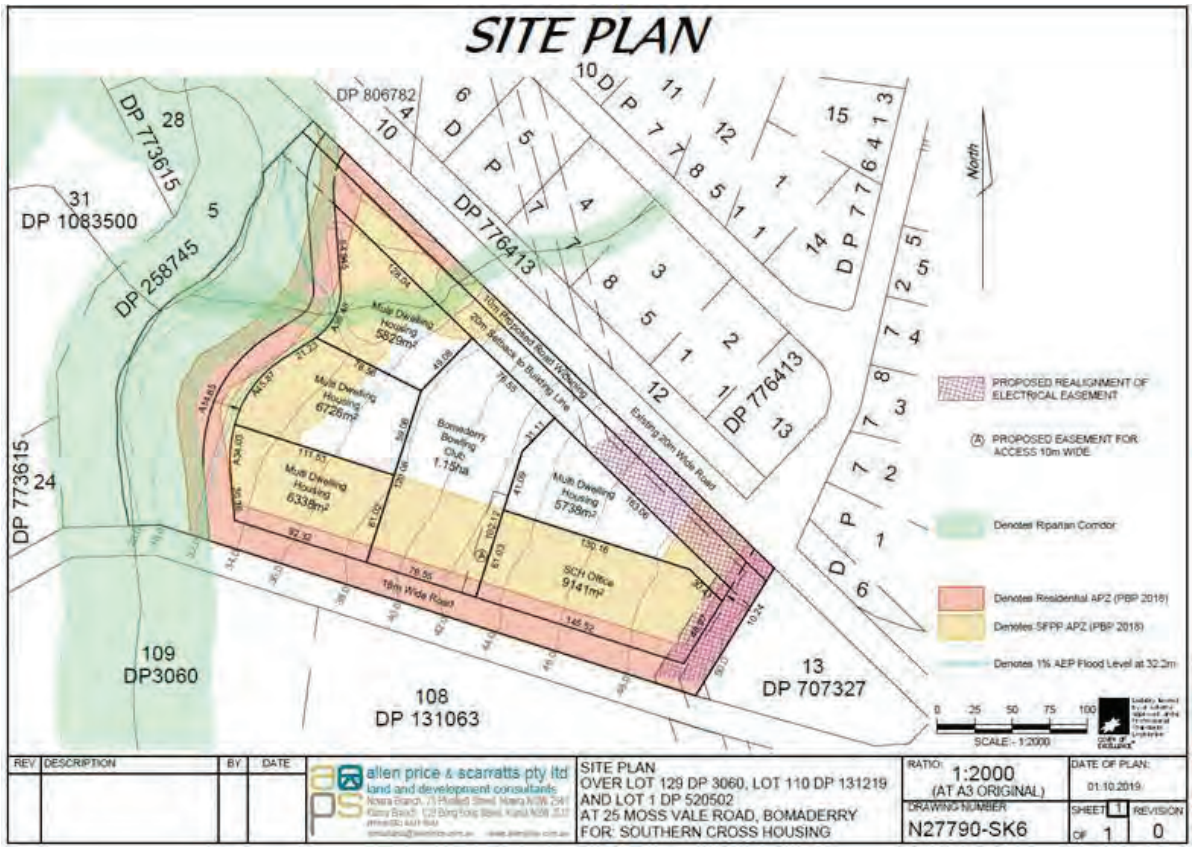


Figure 2. Proposed Development

From:	Hayley Hunter
To:	"richardcampbell123@outlook.com"
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Richard Campbell
NSW
Dear Richard,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

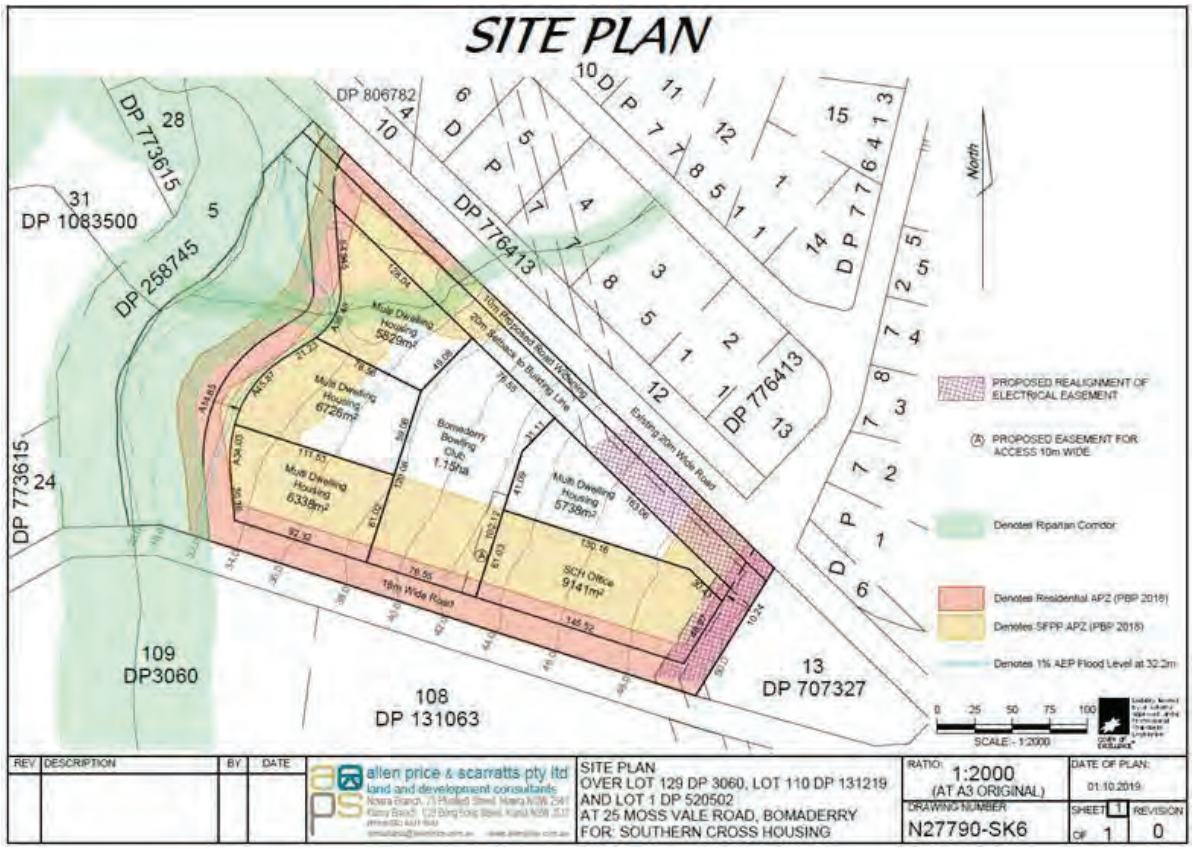


Figure 2. Proposed Development

From: Hayley Hunter
To: jerringong@gmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:43:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Jodi Anne Stewart
NSW
Dear Jodi Anne,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

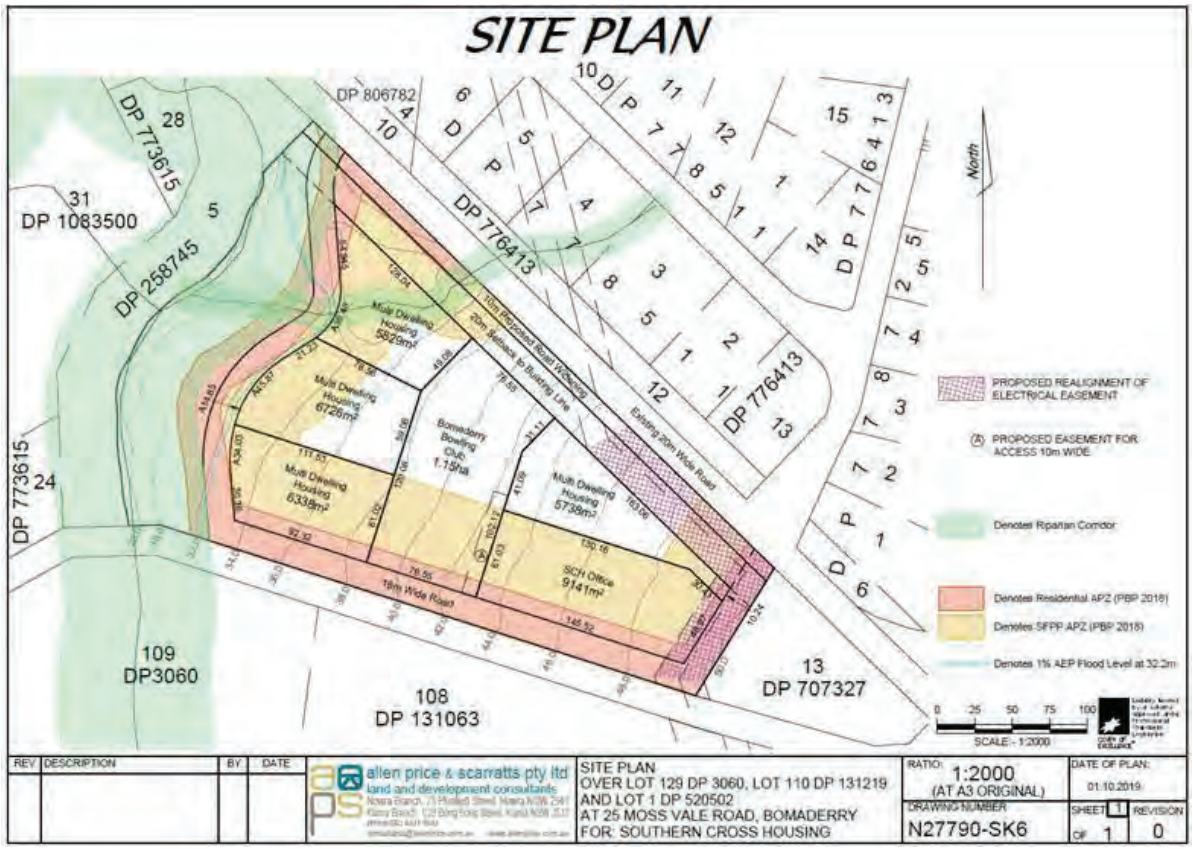


Figure 2. Proposed Development

From:	Hayley Hunter
To:	jlalc@bigpond.com
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Alfred Wellington
NSW
Dear Alfred,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

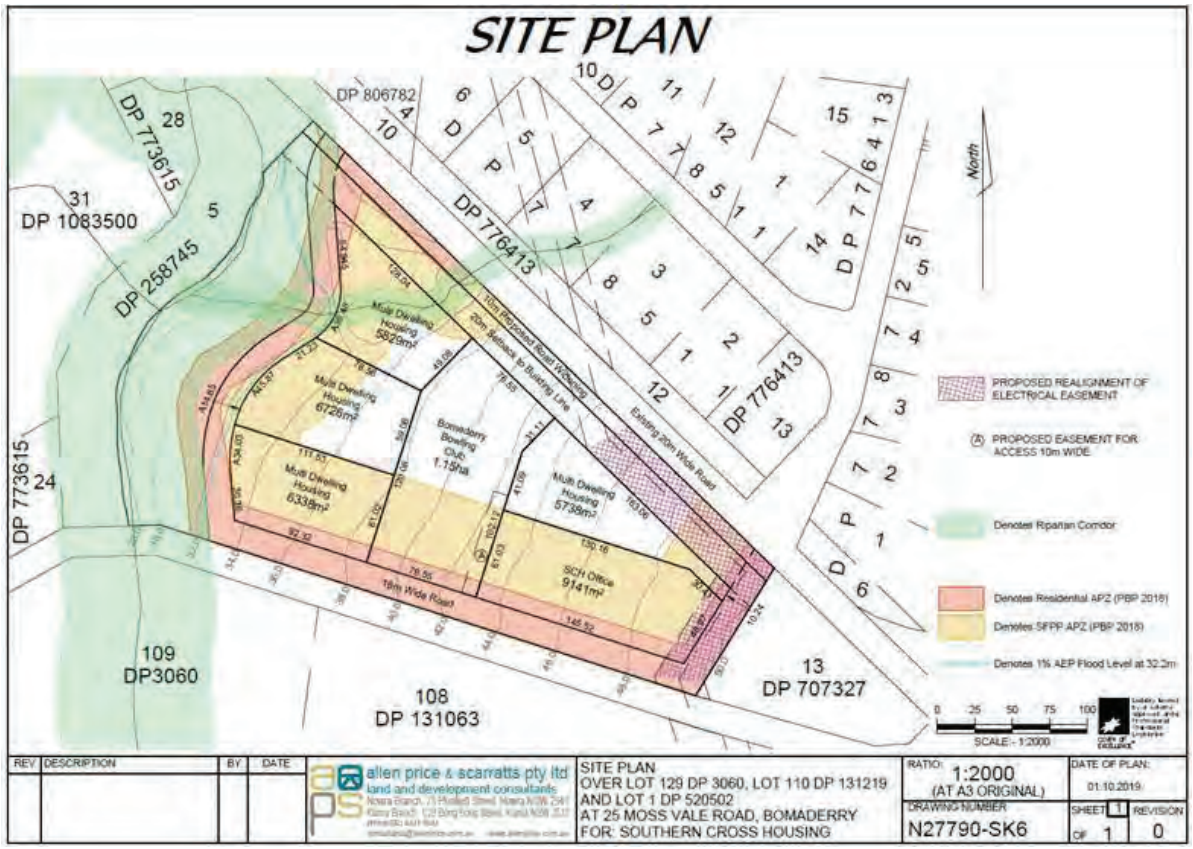


Figure 2. Proposed Development

From: Hayley Hunter
To: karrialchts@gmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:43:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Karrial Johnson
Dear Karrial,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

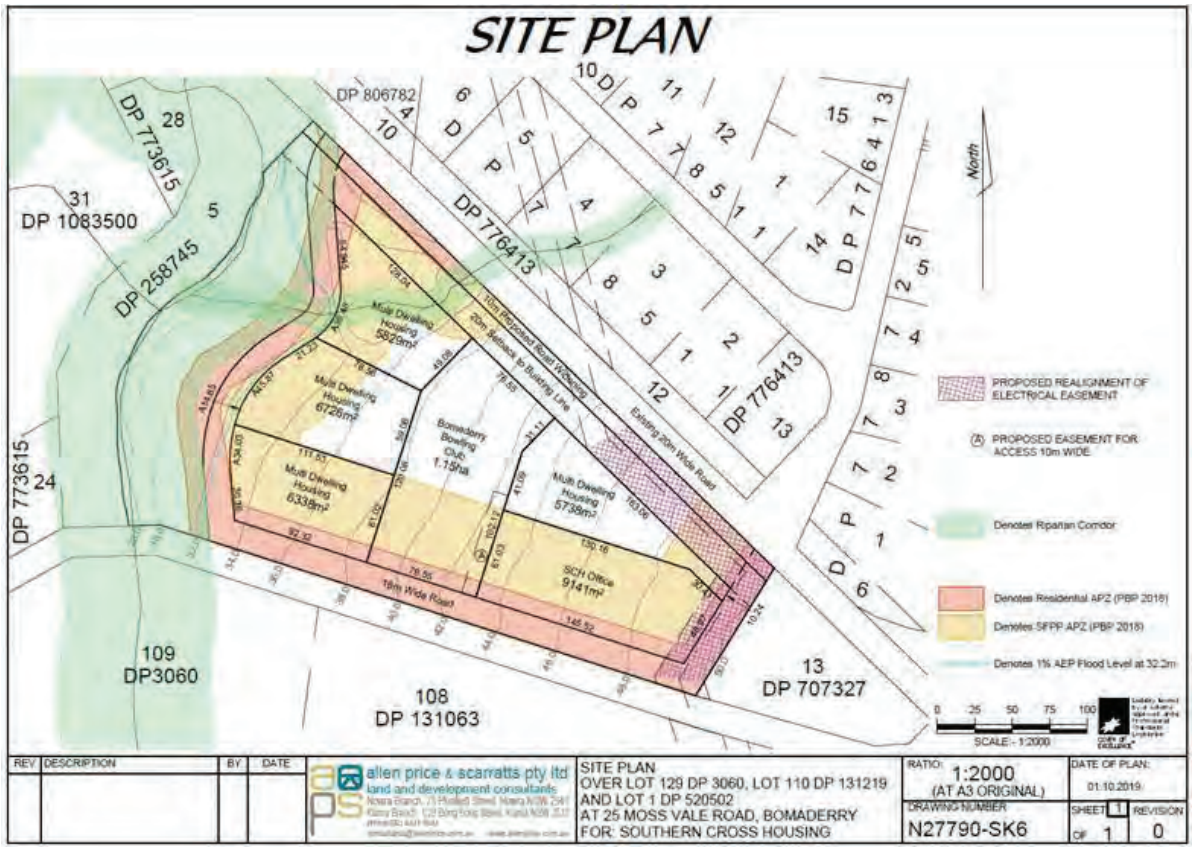


Figure 2. Proposed Development

From: Hayley Hunter
To: munyungachts@gmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:43:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Kaya Dawn Bell
Dear Kaya Dawn,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

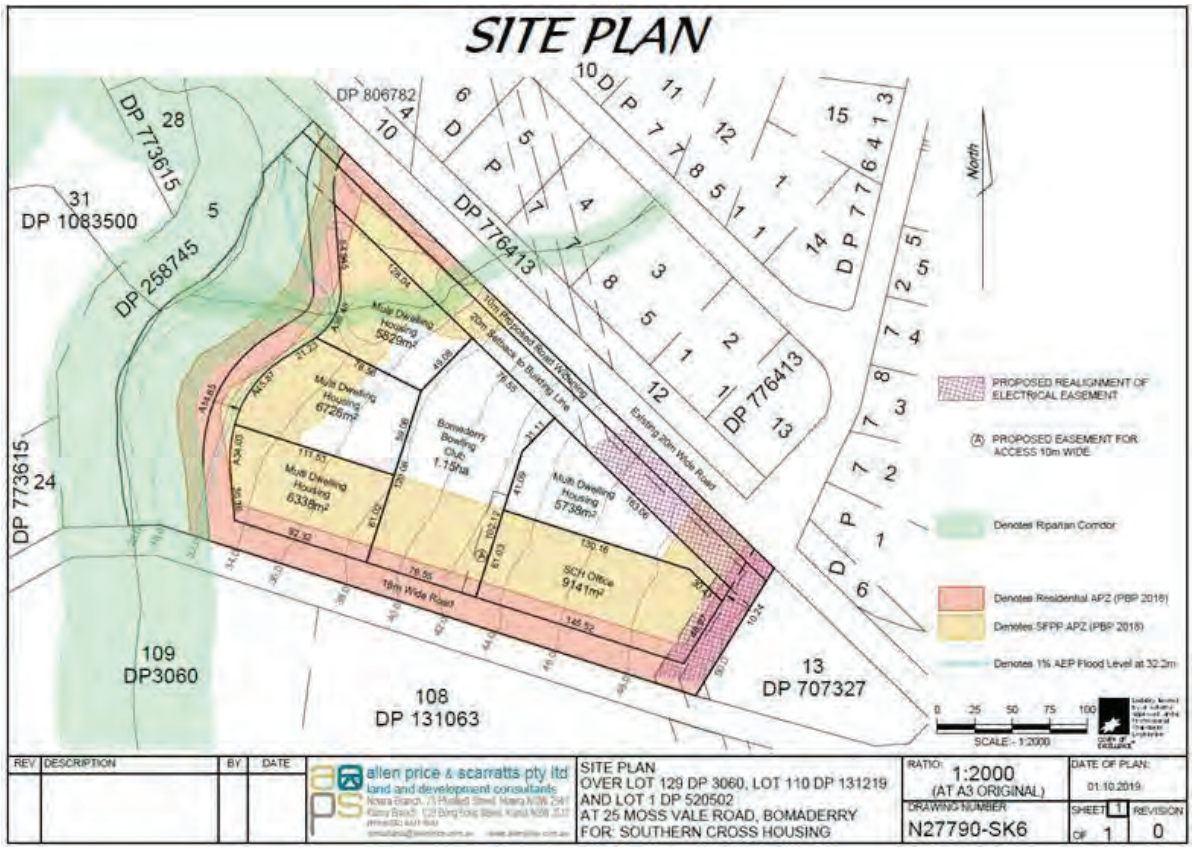


Figure 2. Proposed Development

From: Hayley Hunter
To: murramarangchts@gmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:43:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Roxanne Smith
Dear Roxanne,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

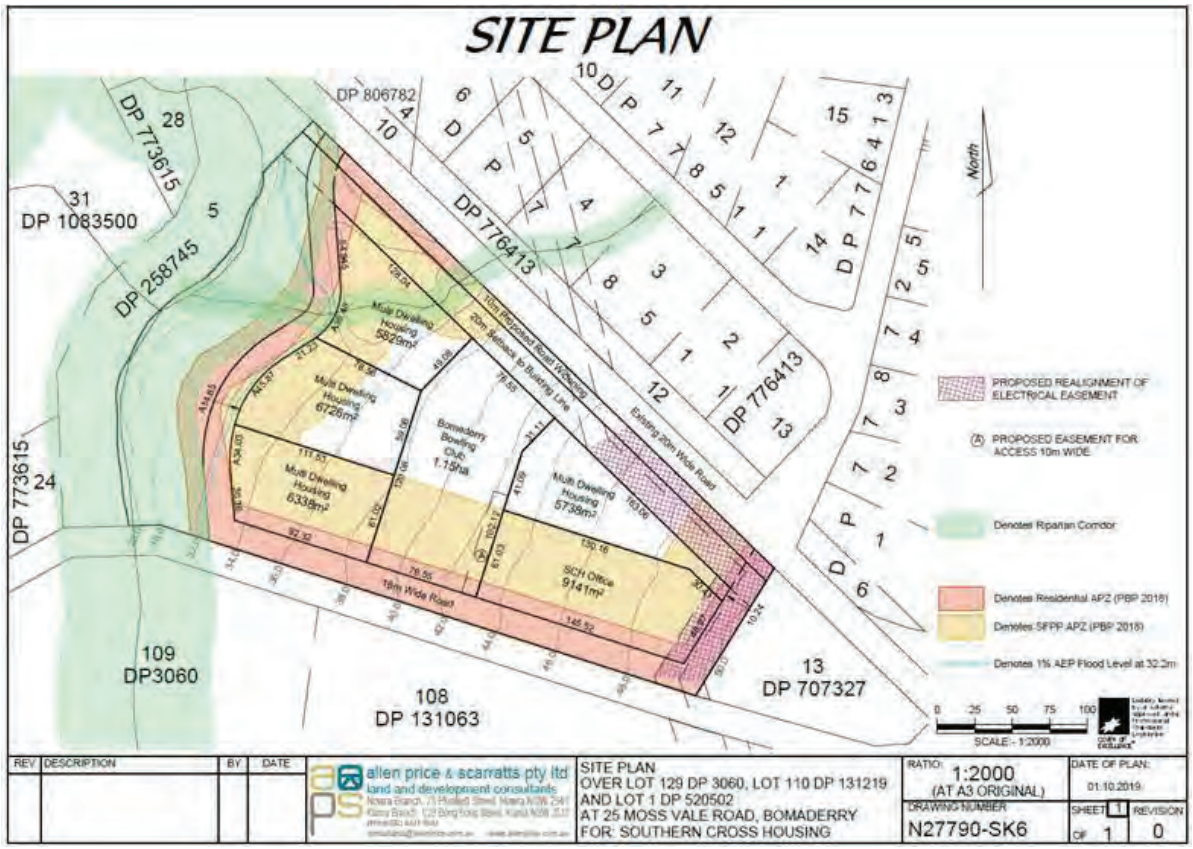


Figure 2. Proposed Development

From: Hayley Hunter
To: murrabidgeemullangari@yahoo.com.au
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:43:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Ryan Johnson
Dear Ryan,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

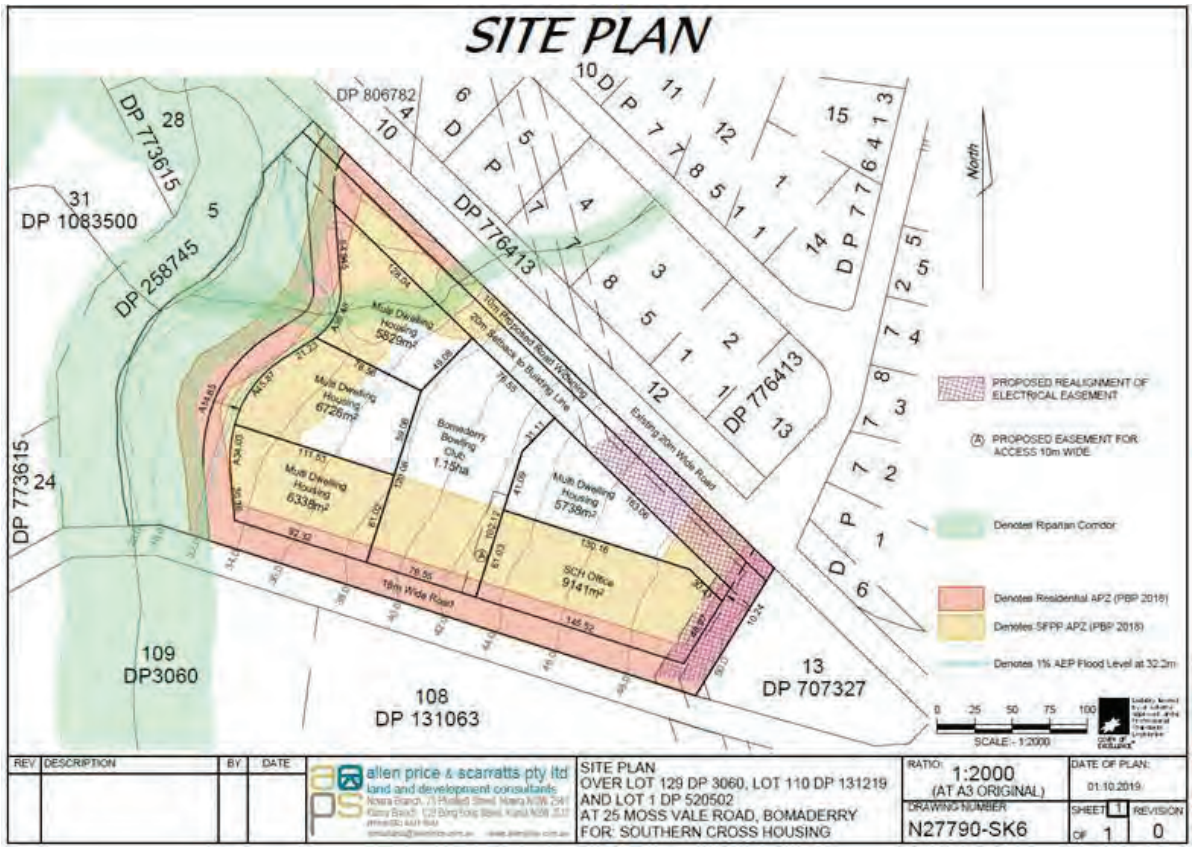


Figure 2. Proposed Development

From:	Hayley Hunter
To:	"murrabidgeemullangari@yahoo.com.au"
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Darleen Johnson
Dear Darleen,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

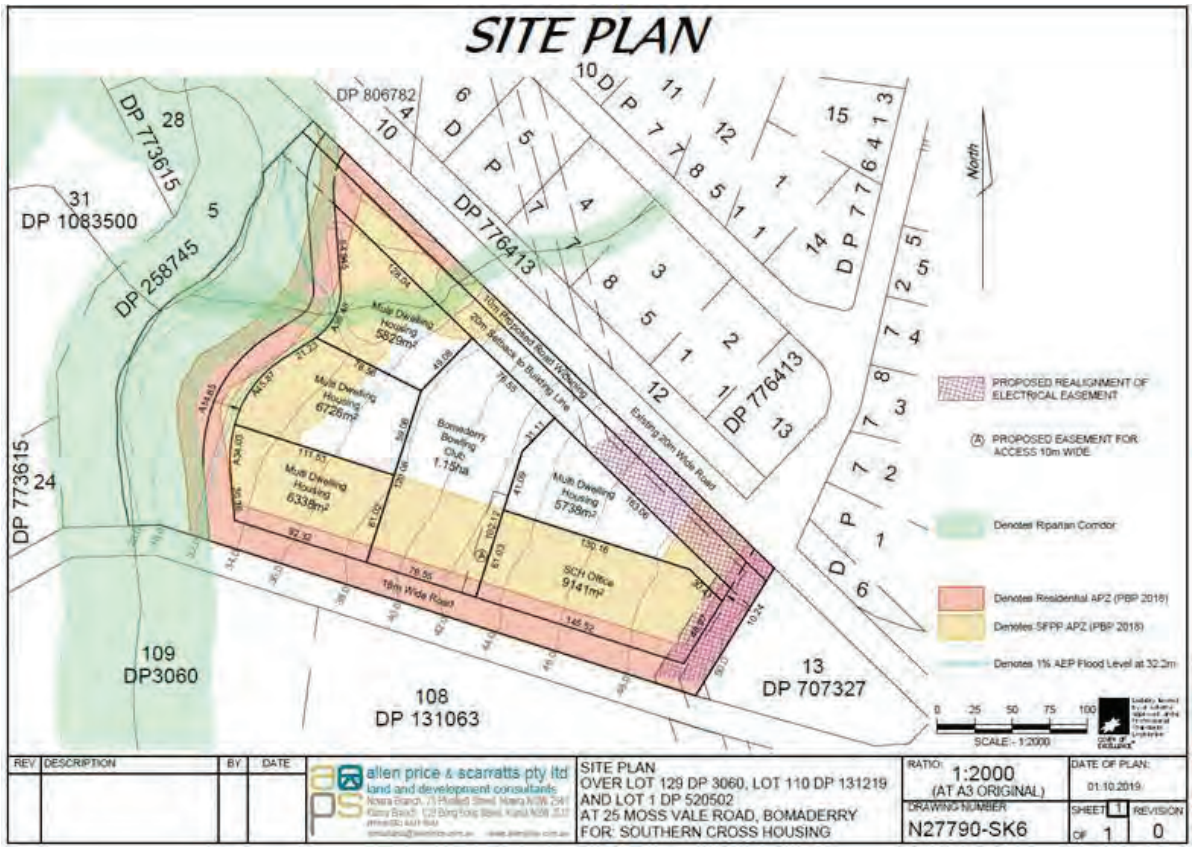


Figure 2. Proposed Development

From:	Hayley Hunter
To:	"murrumbul@gmail.com"
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Mark Henry
Dear Mark,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

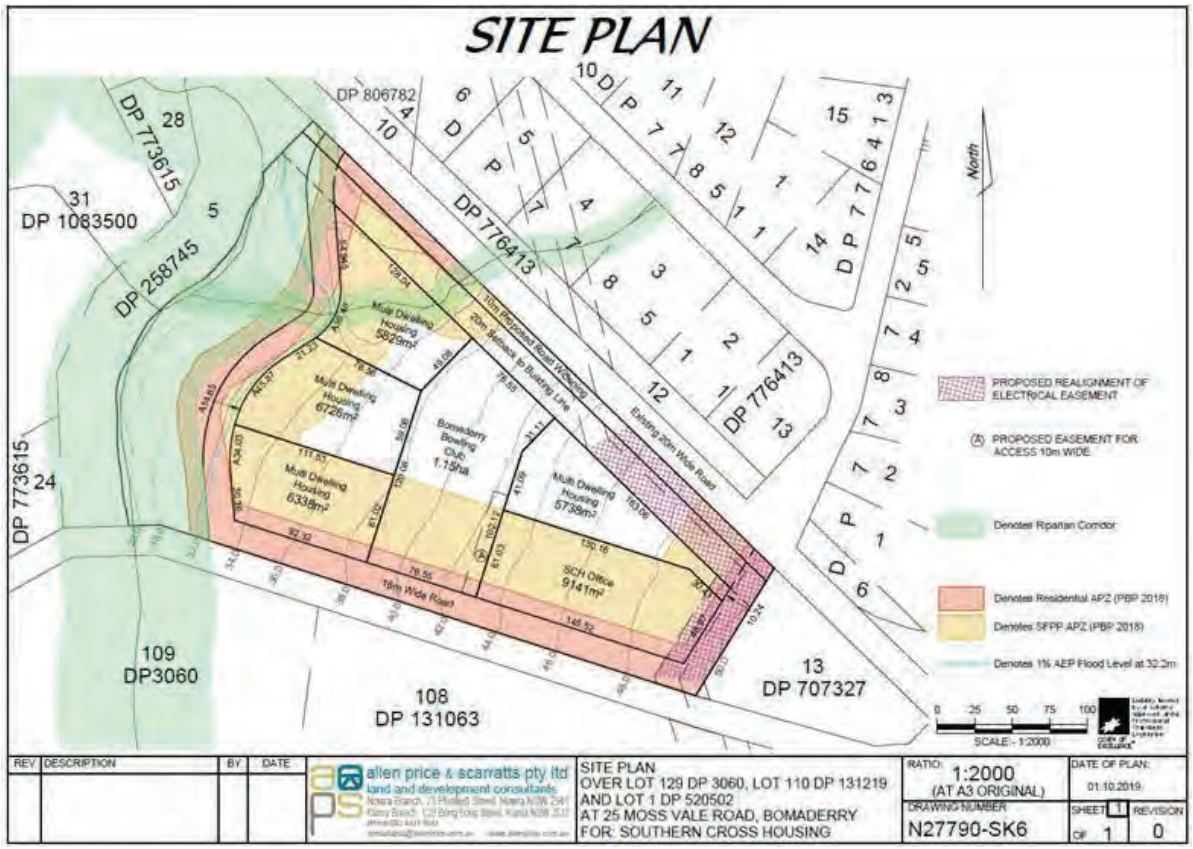


Figure 2. Proposed Development

From:	Hayley Hunter
To:	nowralalc@bigpond.com
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

NSW
Dear Sir or Madam,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

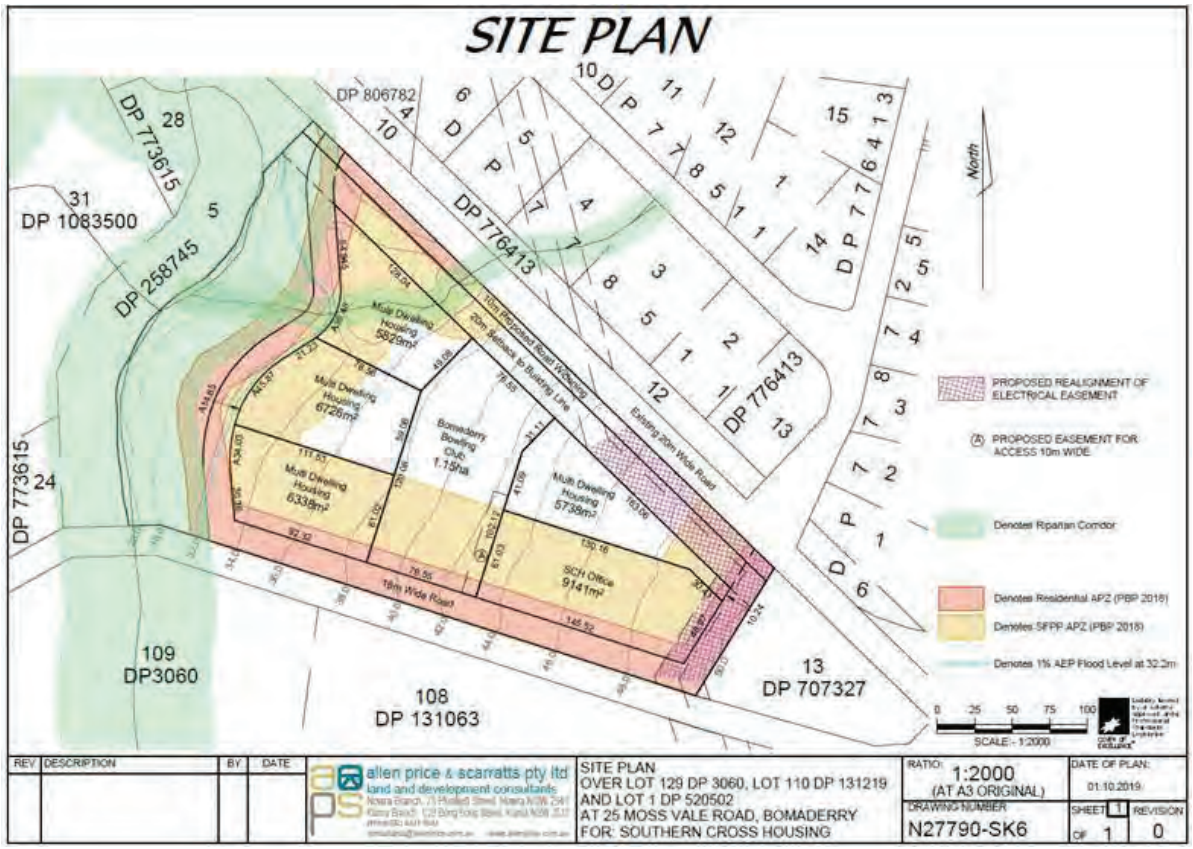


Figure 2. Proposed Development

From: Hayley Hunter
To: nundagurri@gmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:43:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Newton Carriage
Dear Newton,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

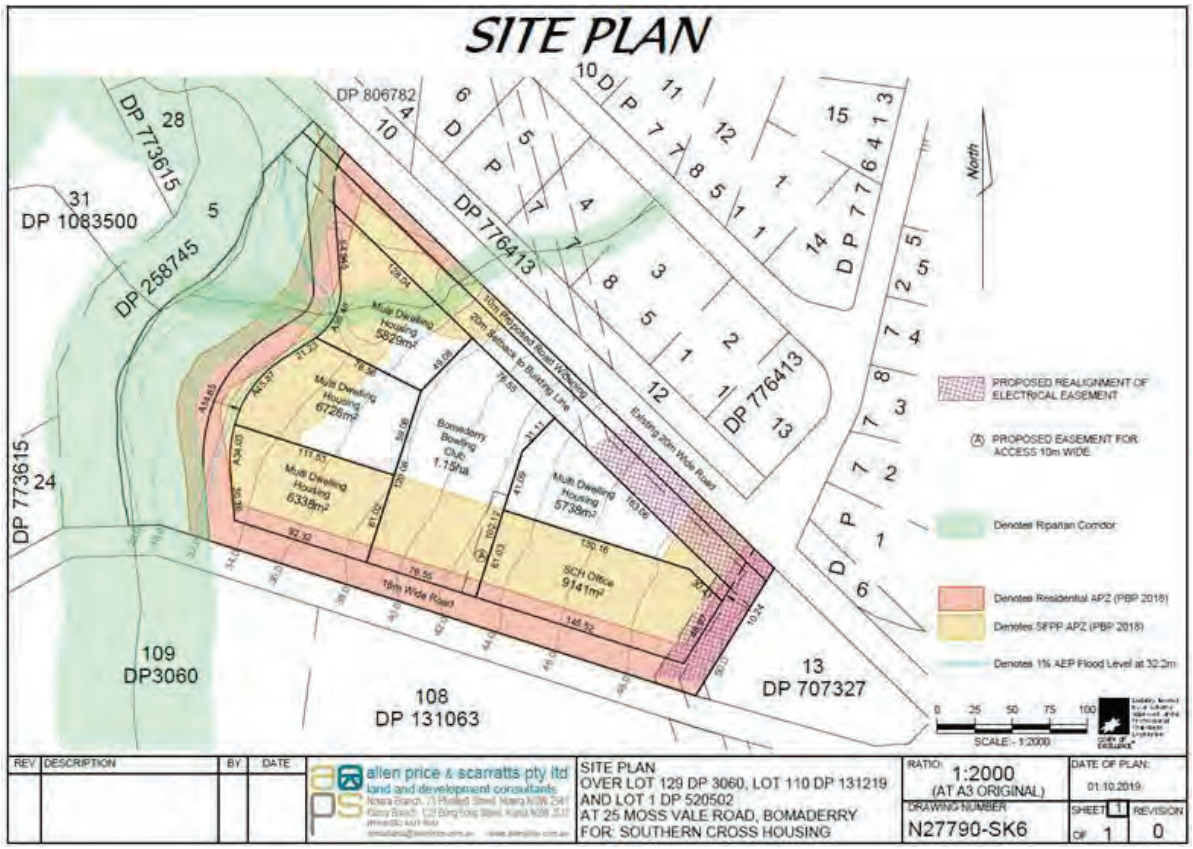


Figure 2. Proposed Development

From: Hayley Hunter
To: pemulwuyd@gmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:43:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Pemulwuy Johnson
Dear Pemulwuy,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

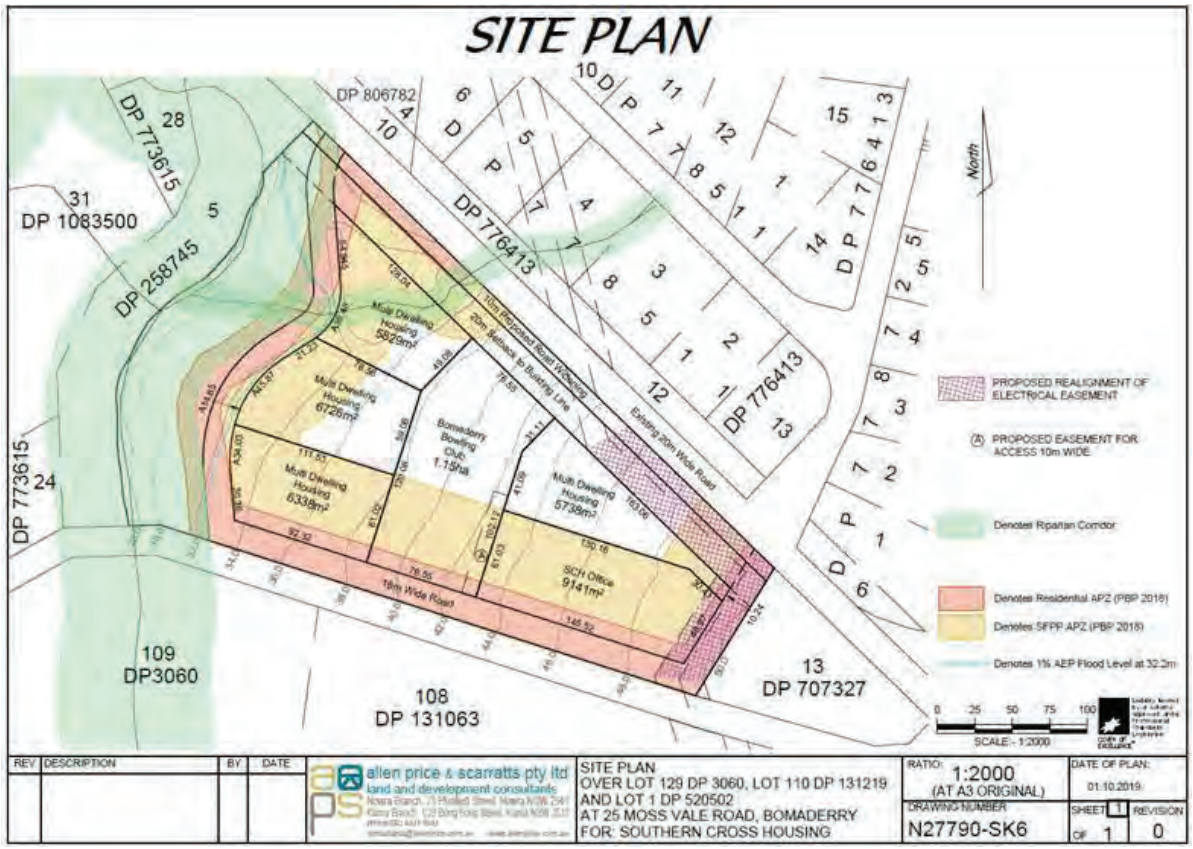


Figure 2. Proposed Development

From:	Hayley Hunter
To:	owen.fpfs@gmail.com
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:43:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Owen Carriage
Dear Owen,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

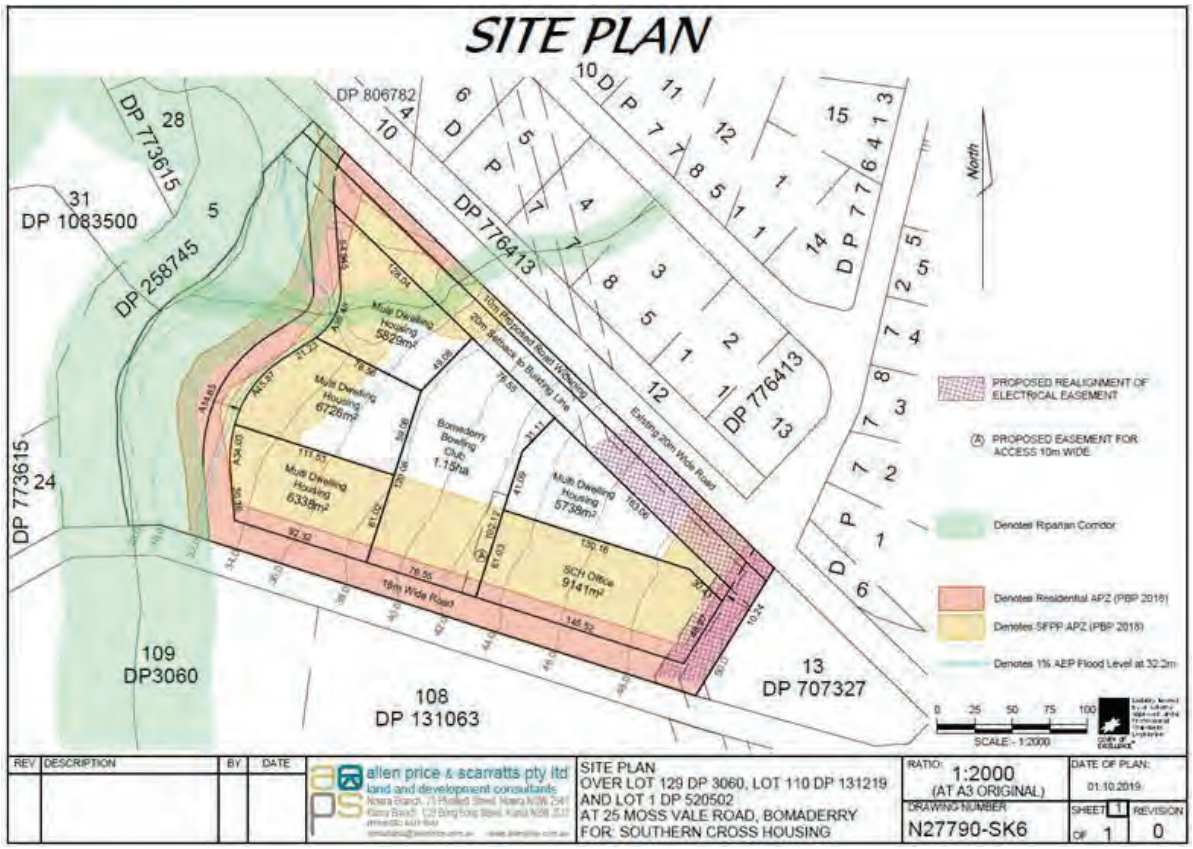


Figure 2. Proposed Development

From:	Hayley Hunter
To:	"troytungai72@outlook.com"
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:44:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Troy Tungai
NSW
Dear Troy,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

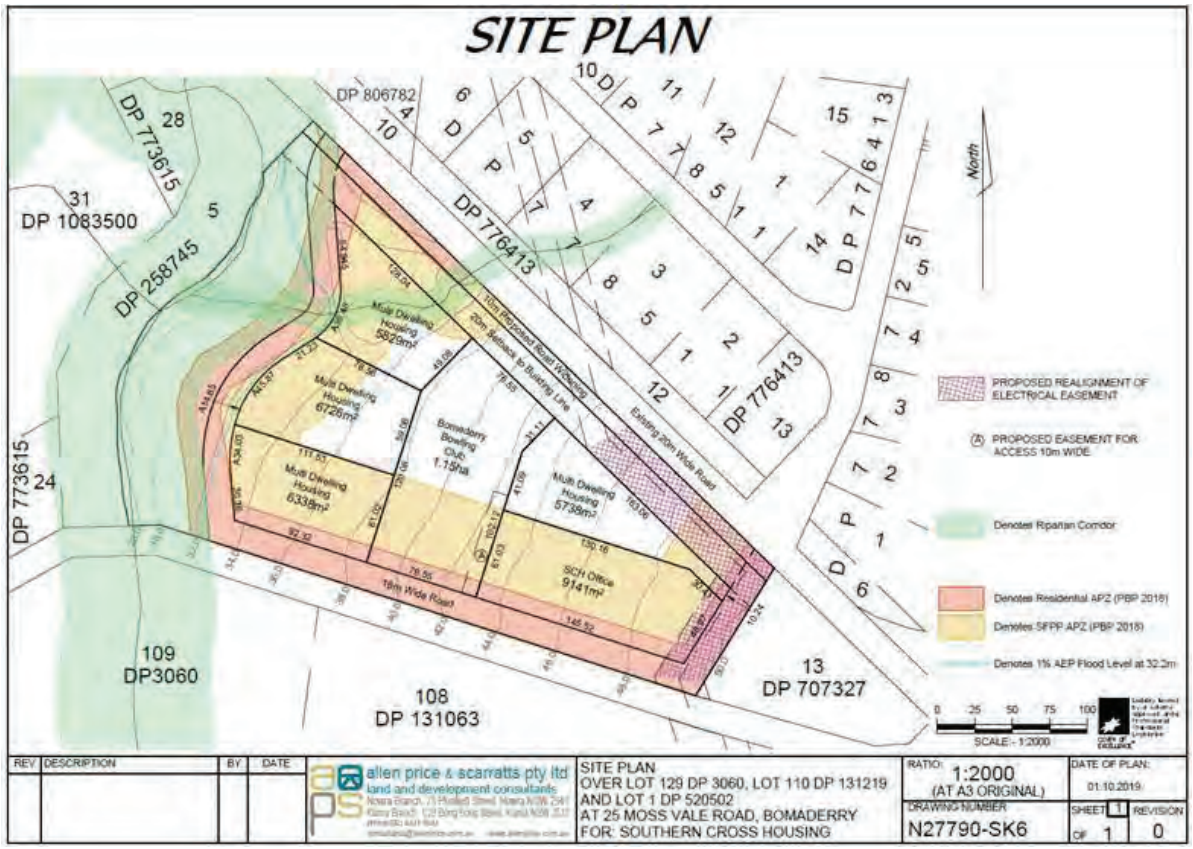


Figure 2. Proposed Development

From: Hayley Hunter
To: leannecaroltungai@gmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:44:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Leanne Tungai
Dear Leanne,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

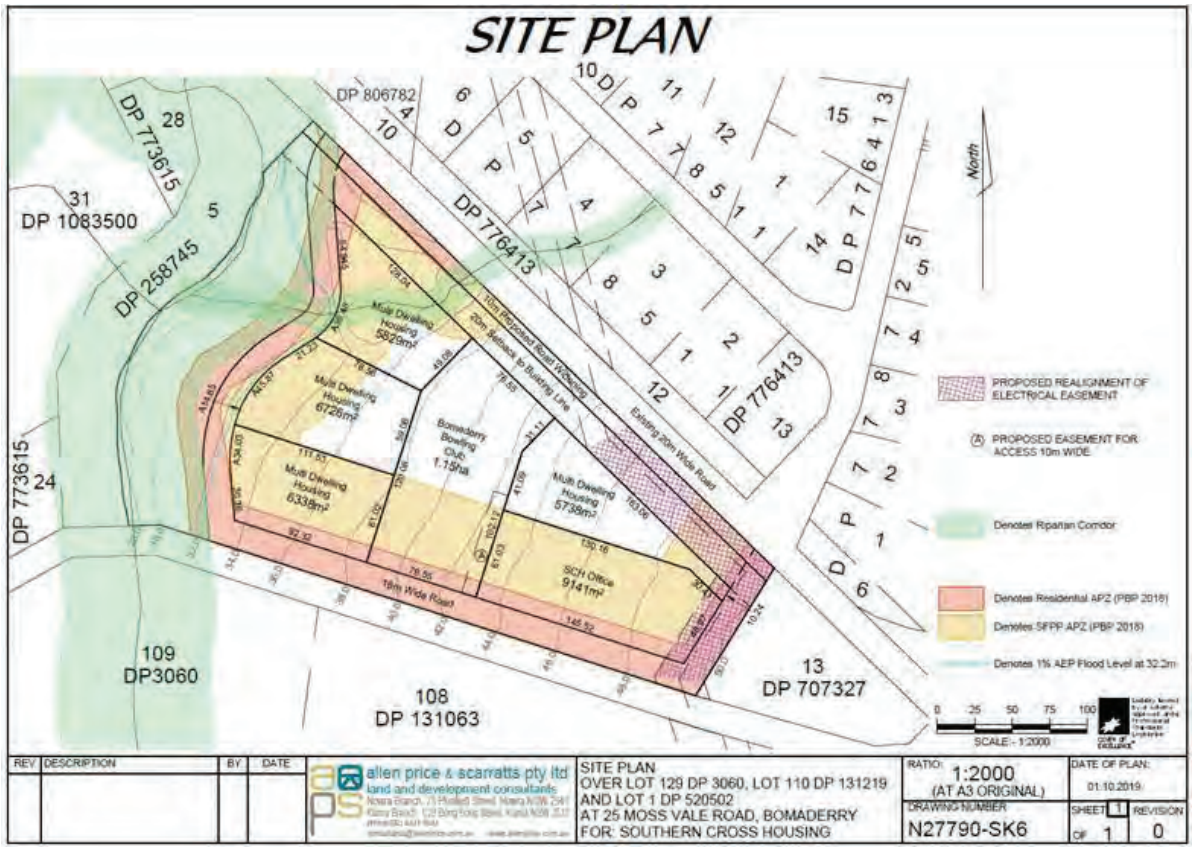


Figure 2. Proposed Development

From: Hayley Hunter
To: admin@ulladullalalc.com.au
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:44:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

NSW
Dear Sir or Madam,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

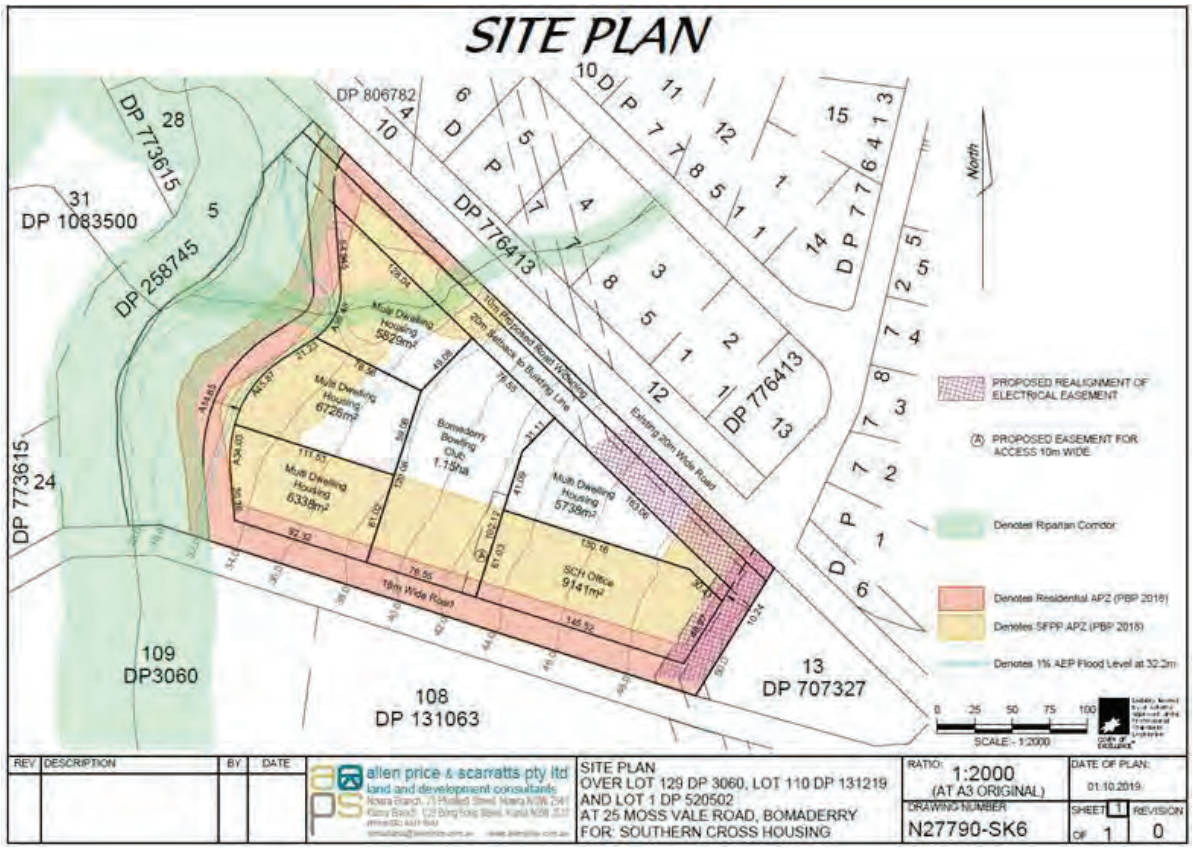


Figure 2. Proposed Development

From: Hayley Hunter
To: Walbunja@gmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:44:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Hika Te Kowhai
NSW
Dear Hika Te,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

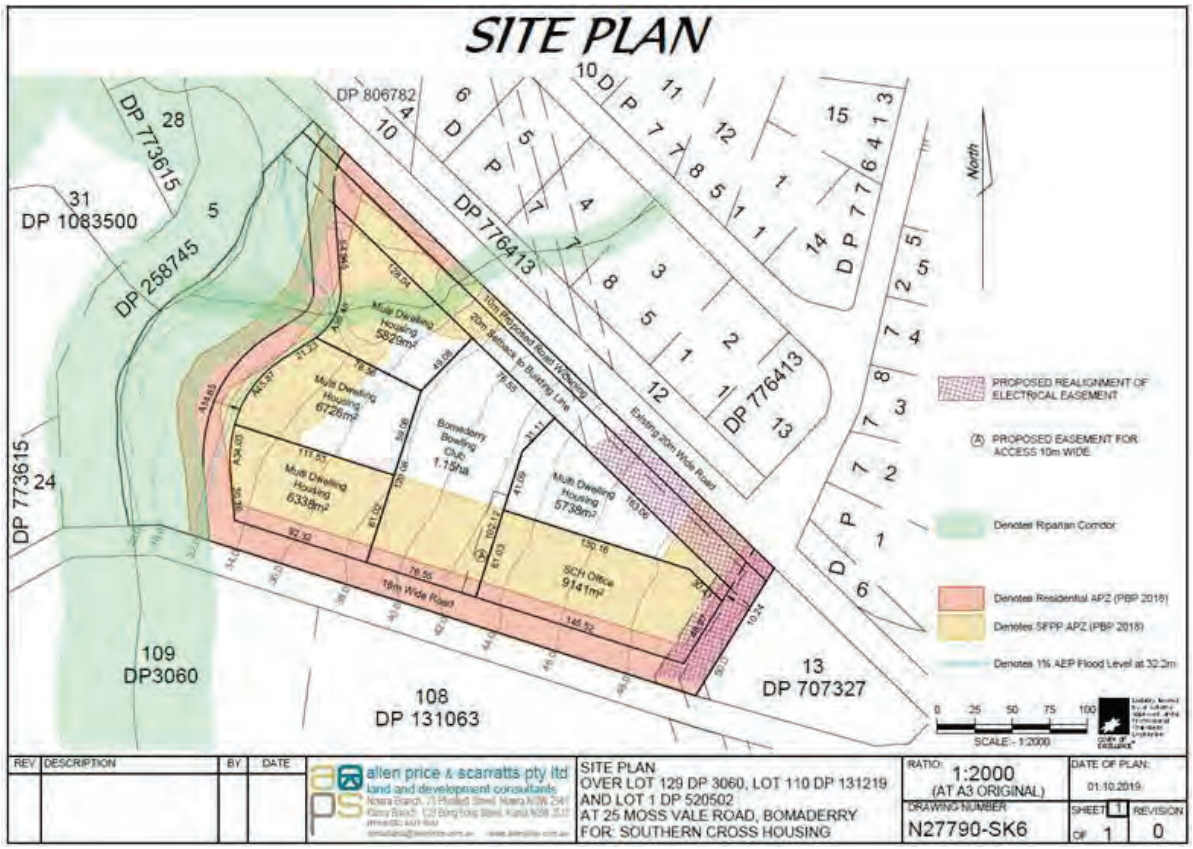


Figure 2. Proposed Development

From: Hayley Hunter
To: walgaluchts@gmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:44:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Ronald Stewart
Dear Ronald,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

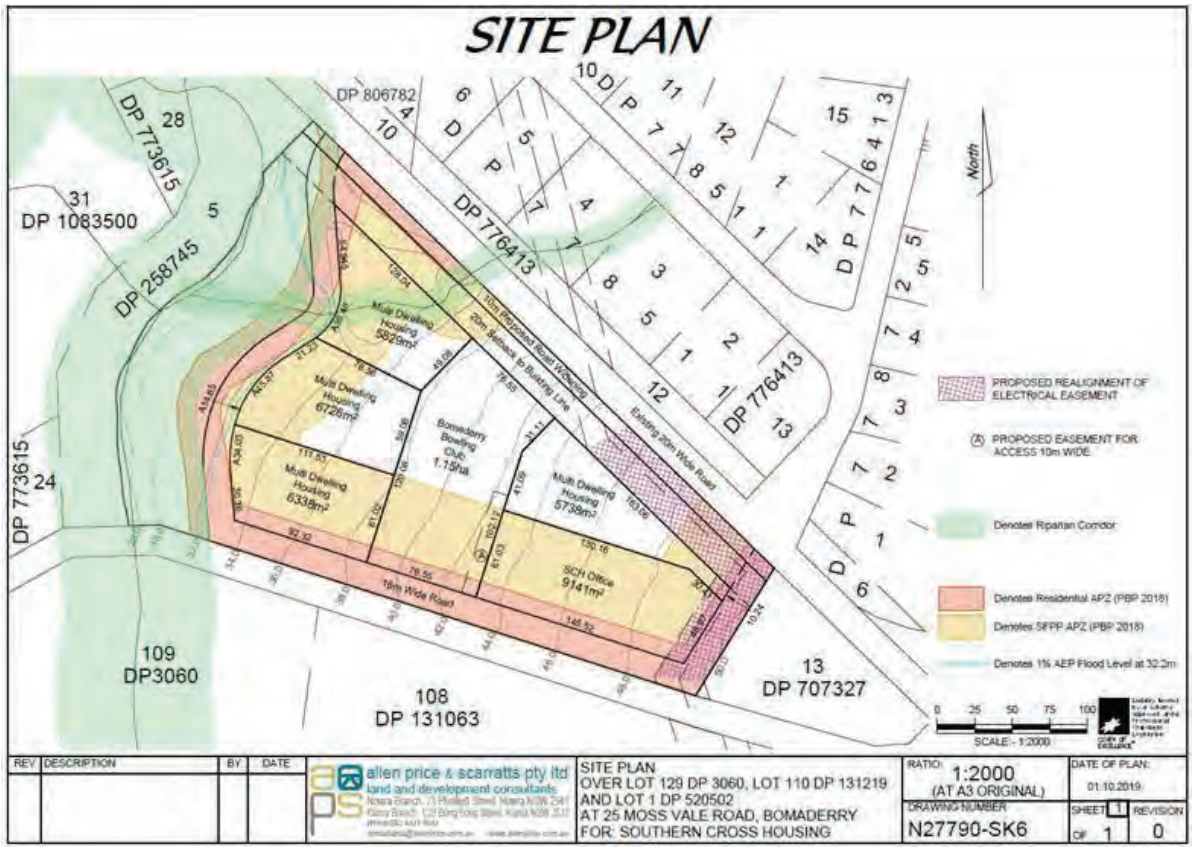


Figure 2. Proposed Development

From:	Hayley Hunter
To:	"gayle.w@hotmail.com"
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:44:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Gayle Watts
Dear Gayle,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

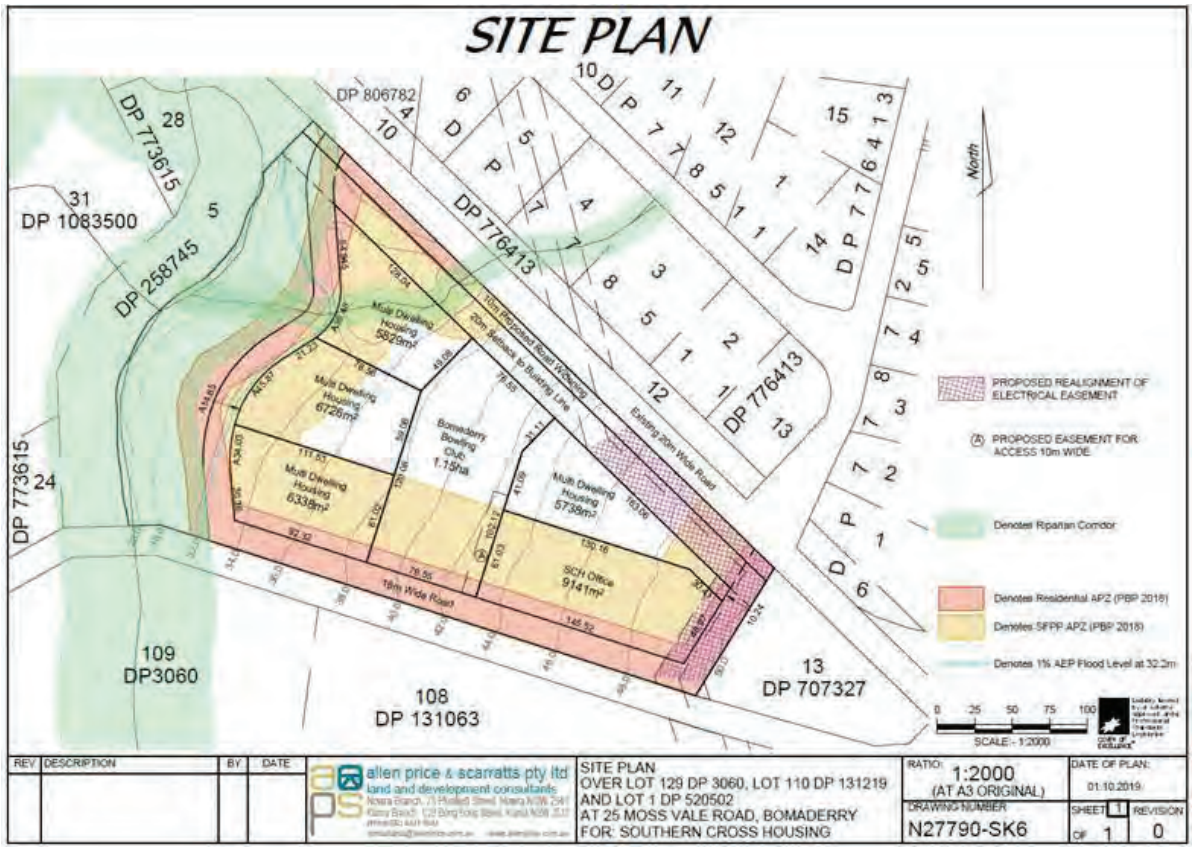


Figure 2. Proposed Development

From: Hayley Hunter
To: warrabingi@gmail.com
Subject: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 4:44:00 PM
Attachments: image002.emz
image003.png

Reference: 2007
17 April 2020

Nathanial Kennedy
Dear Nathanial,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

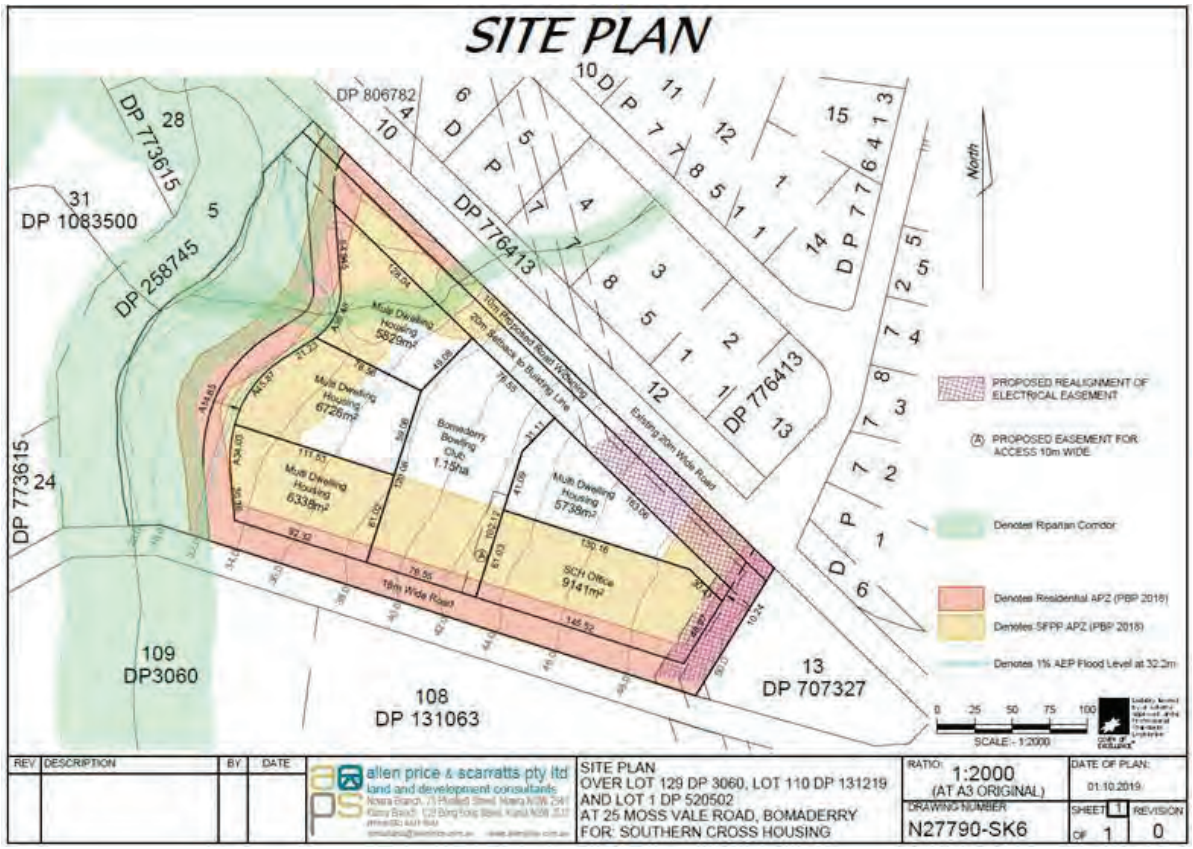


Figure 2. Proposed Development

From:	Hayley Hunter
To:	"noelwebster2@bigpond.com"
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:44:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Noel Webster
NSW
Dear Noel,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

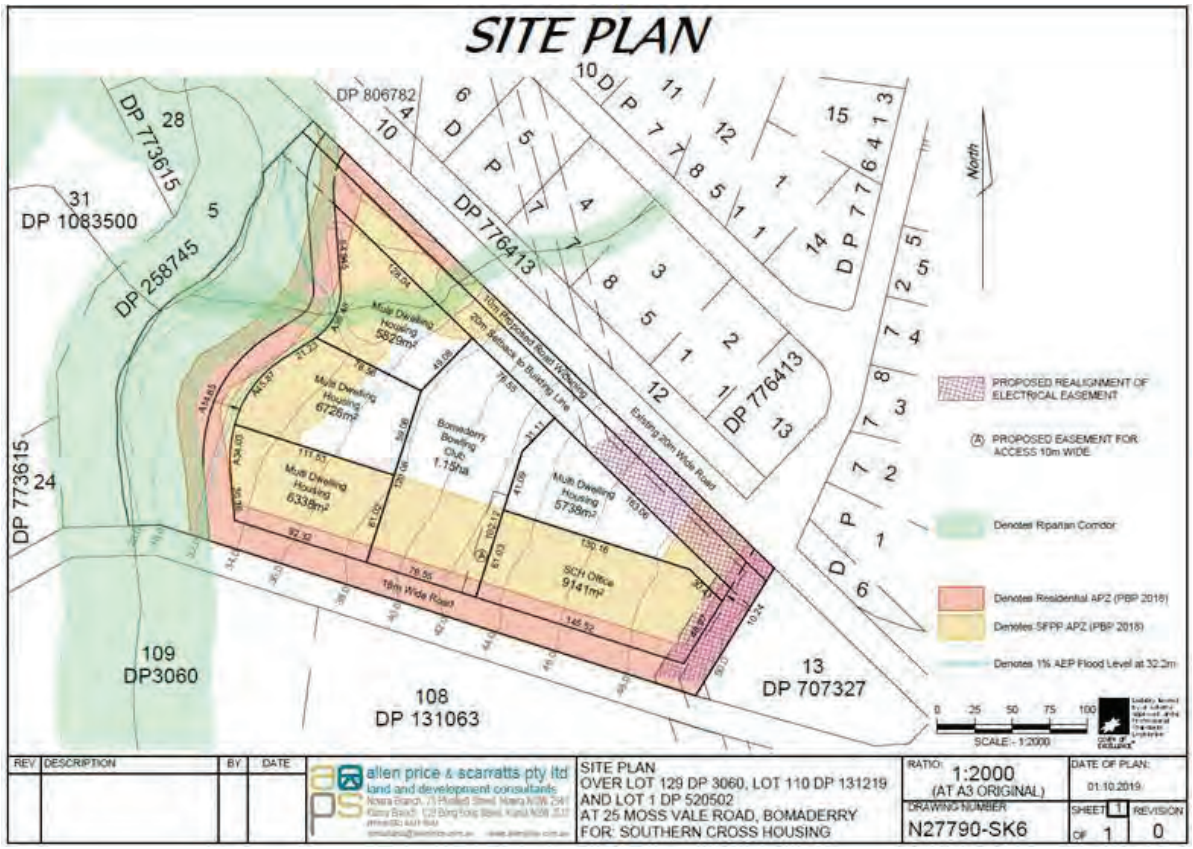


Figure 2. Proposed Development

From:	Hayley Hunter
To:	wingikarachts@gmail.com
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:44:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Hayley Bell
Dear Hayley,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

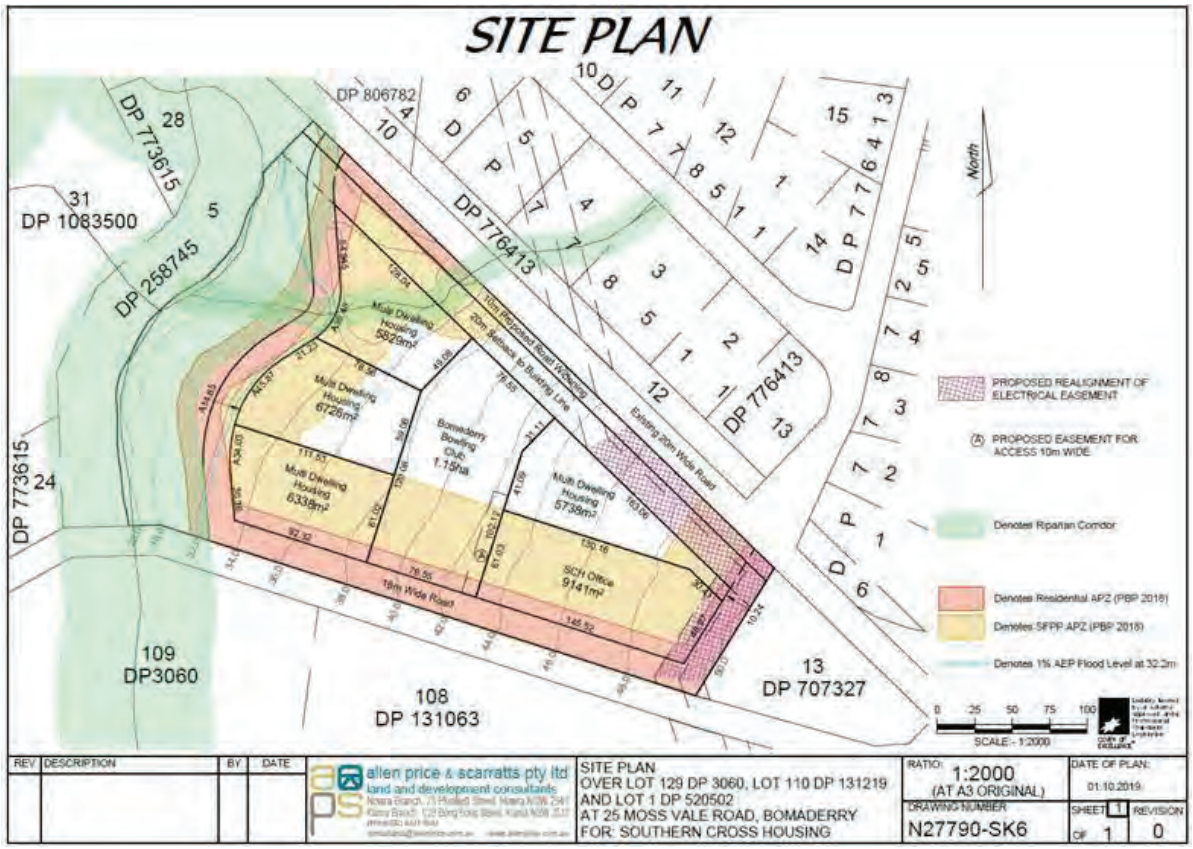


Figure 2. Proposed Development

From:	Hayley Hunter
To:	wullunglb@gmail.com
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:44:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Lee-Roy James Boota
NSW
Dear Lee-Roy James,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

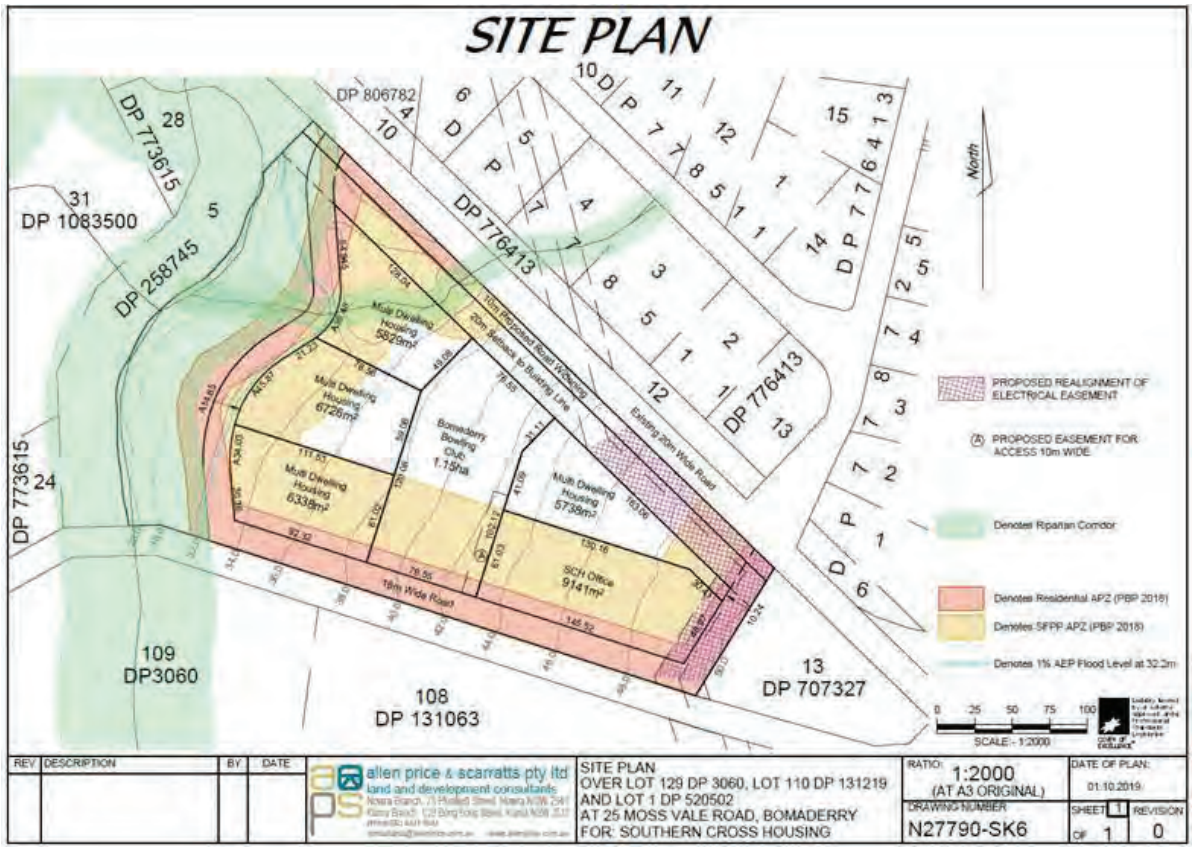


Figure 2. Proposed Development

From:	Hayley Hunter
To:	bd875@uow.edu.au
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:44:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Blaan Davis
Dear Blaan,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal

objects and/or places within the proposed project area

- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

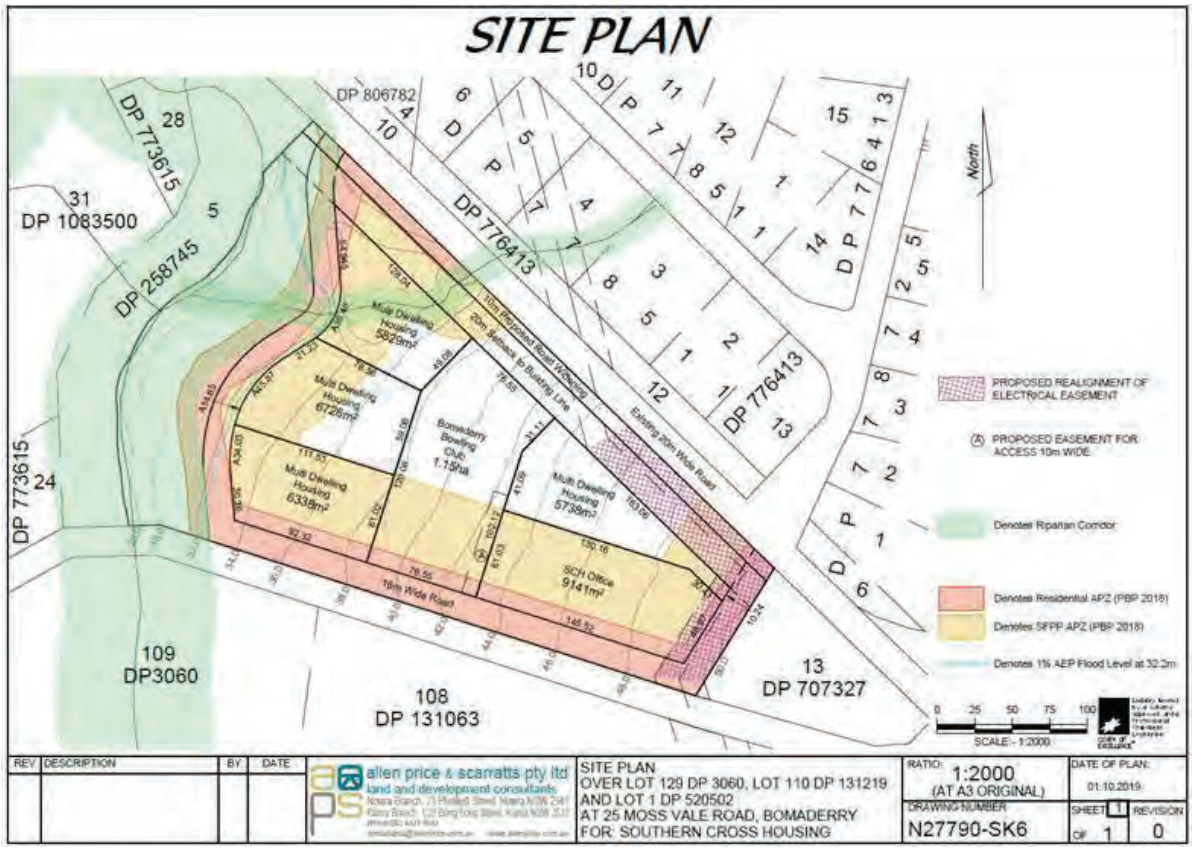


Figure 2. Proposed Development

From:	Hayley Hunter
To:	yurrandaali_cs@outlook.com
Subject:	Stage 2/3 Mossvale Road
Date:	Friday, 17 April 2020 4:44:00 PM
Attachments:	image002.emz image003.png

Reference: 2007
17 April 2020

Bo Field
NSW
Dear Bo,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.

- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the

resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

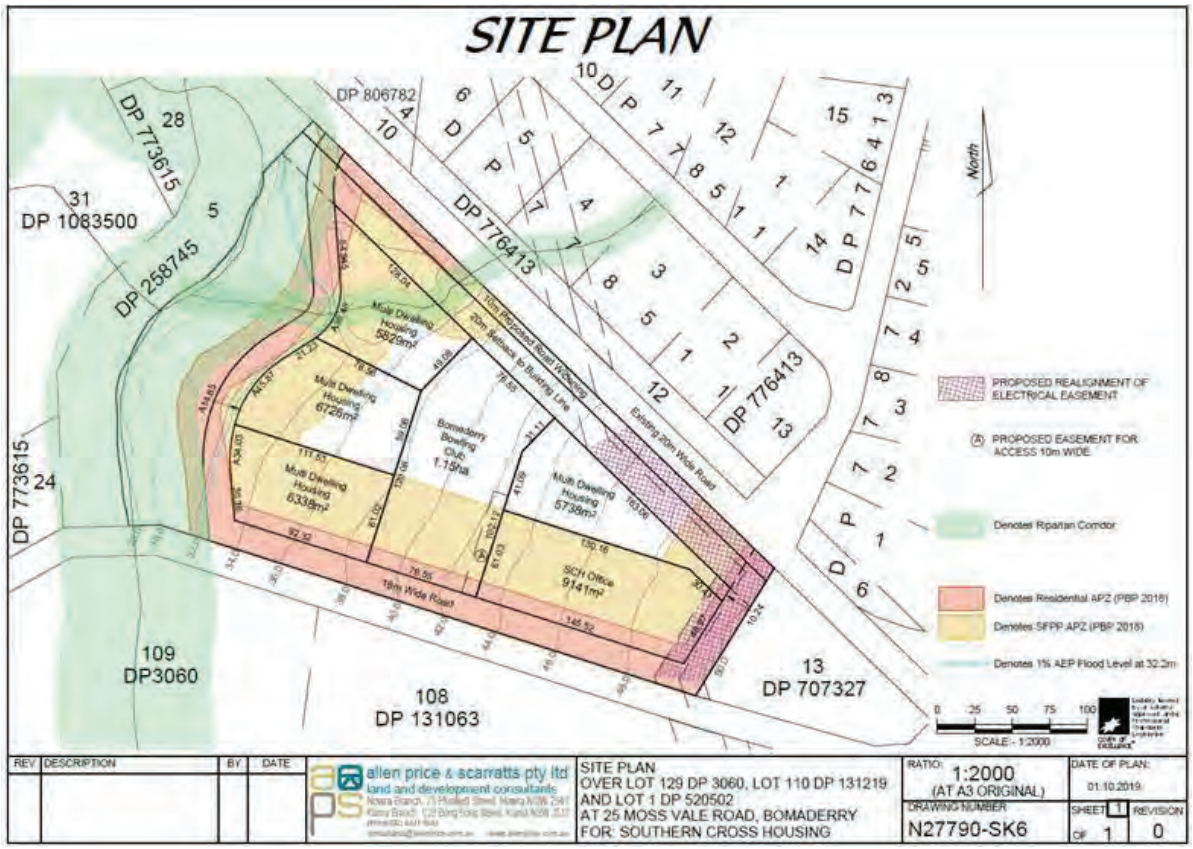


Figure 2. Proposed Development

Reference: 2107

Minnamunnung
Aaron Broad
1 Waratah Avenue
Albion Park Rail NSW 2527

Dear Aaron,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT: 25 MOSS VALE ROAD, BOMADERRY, NEW SOUTH WALES

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.

As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the study area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences
- Review of site nature and distribution throughout the area surrounding the study area
- Review of site and material types along with their densities within the study area
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area
- Review of natural resources present within the study and their likely use by Aboriginal people
- Review of the relationships, both spatial and temporal in the local area

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

© 2021 Austral Archaeology

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the propose project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. This stage is complete

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

In order to fully assess the nature and extent of the archaeological deposit, Austral Archaeology have developed an archaeological testing methodology which follows the requirements of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the *CoP*) (DECCW 2010).

Our test excavation methodology is based on the *CoP* which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The *CoP* is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days.

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.

- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Dependant on the soils encountered and site conditions, material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and Cardno are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGIINAL CULTURAL HERITAGE ASSESSMENT REPORT

An ACHAR will be prepared that documents the assessment Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts. The ACHAR will be prepared in accordance with the Consultation Requirements, Code of Practice and *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (2010, 2010, Office of Environment and Heritage 2011).

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.

- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12 May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0429 038 258 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, The Archaeologists handbook, Allen & Unwin, NSW.

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

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

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

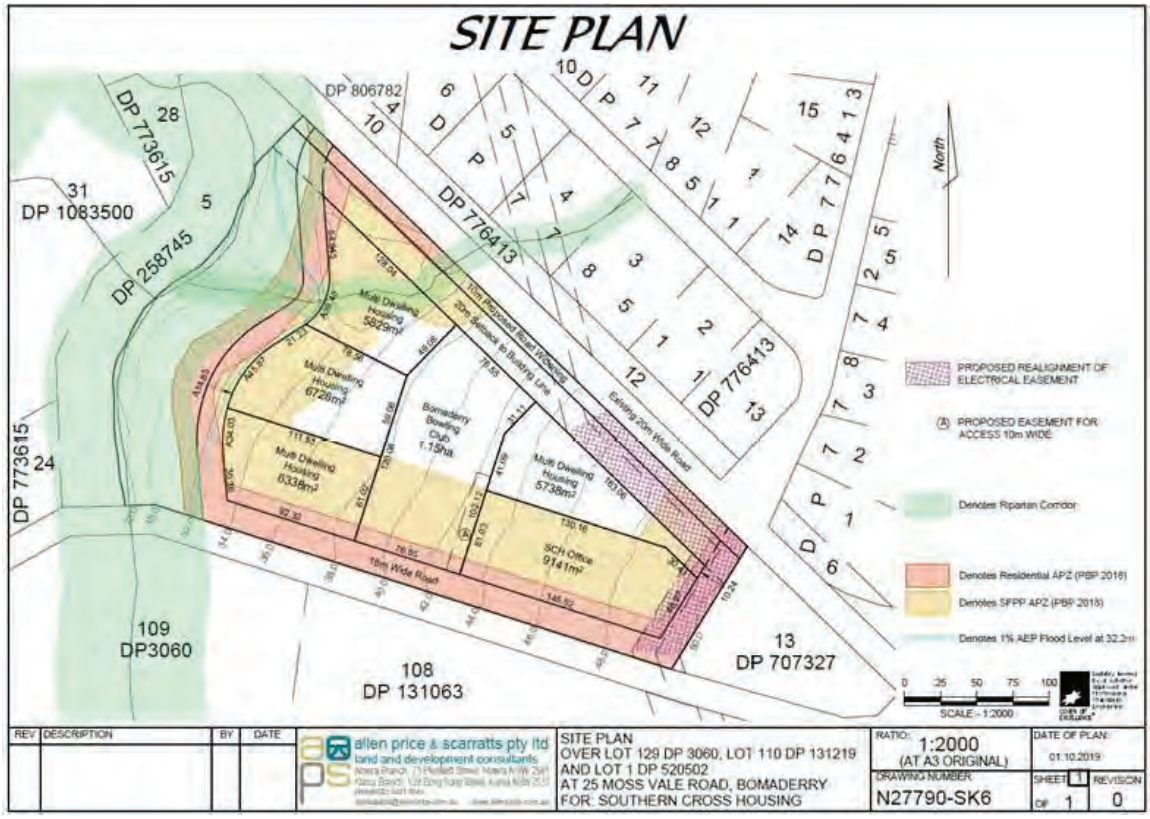


Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*


SITE PLAN
DP 806782
DP 773615
28
31
DP 1083500
5
DP 258745
DP 776413
DP 776413
DP 773615
24
109
DP3060
108
DP 131063
13
DP 707327
North
Multi Dwelling Housing 5893m²
Multi Dwelling Housing 6726m²
Multi Dwelling Housing 6338m²
Bomaderry Bowling Club 1.15ha
Multi Dwelling Housing 5738m²
SCH Office 9141m²
20m Reticulated Road W/Ckwing
Existing 20m Wide Road
18m Wide Road
PROPOSED REALIGNMENT OF ELECTRICAL EASEMENT
(A) PROPOSED EASEMENT FOR ACCESS 10m WIDE
Denotes Riparian Corridor
Denotes Residential APZ (PBP 2016)
Denotes SFPP APZ (PBP 2019)
Denotes 1% AEP Flood Level at 32.2m
0 25 50 75 100
SCALE - 1:2000
REV
DESCRIPTION
BY
DATE
allen price & scarratts pty ltd
land and development consultants
SITE PLAN
OVER LOT 129 DP 3060, LOT 110 DP 131219
AND LOT 1 DP 520502
AT 25 MOSS VALE ROAD, BOMADERRY
FOR: SOUTHERN CROSS HOUSING
RATIO: 1:2000
(AT A3 ORIGINAL)
DATE OF PLAN:
01.10.2019
DRAWING NUMBER
N27790-SK6
SHEET 1
OF 1
REVISION
0

Reference: 2107
17 April 2020

Shoalhaven Elders and Friends Organisation
Gordon Wellington
1 Roma Close
Bomaderry Rocks NSW 2541

Dear Gordon,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT: 25 MOSS VALE ROAD, BOMADERRY, NEW SOUTH WALES

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.

As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the study area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences
- Review of site nature and distribution throughout the area surrounding the study area
- Review of site and material types along with their densities within the study area
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area
- Review of natural resources present within the study and their likely use by Aboriginal people
- Review of the relationships, both spatial and temporal in the local area

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

© 2021 Austral Archaeology

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the propose project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. This stage is complete

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

In order to fully assess the nature and extent of the archaeological deposit, Austral Archaeology have developed an archaeological testing methodology which follows the requirements of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the *CoP*) (DECCW 2010).

Our test excavation methodology is based on the *CoP* which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The *CoP* is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days.

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.

- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Dependant on the soils encountered and site conditions, material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and Cardno are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGIINAL CULTURAL HERITAGE ASSESSMENT REPORT

An ACHAR will be prepared that documents the assessment Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts. The ACHAR will be prepared in accordance with the Consultation Requirements, Code of Practice and *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (2010, 2010, Office of Environment and Heritage 2011).

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.

- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12 May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0429 038 258 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, The Archaeologists handbook, Allen & Unwin, NSW.

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

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

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

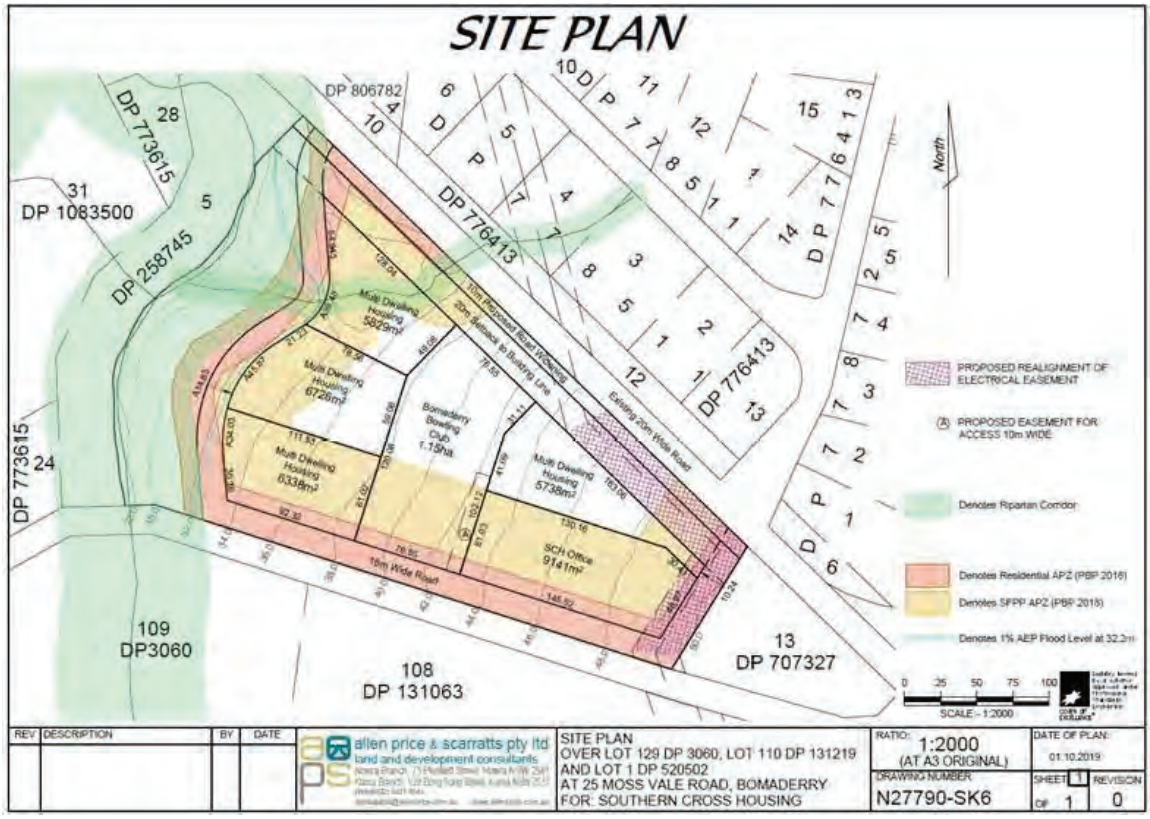


Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*


SITE PLAN
DP 806782
DP 773615
28
31
DP 1083500
5
DP 258745
DP 776413
DP 776413
DP 773615
24
109
DP3060
108
DP 131063
13
DP 707327
North
Multi Dwelling Housing 5893m²
Multi Dwelling Housing 6726m²
Multi Dwelling Housing 6338m²
Bomaderry Bowling Club 1.15ha
Multi Dwelling Housing 5738m²
SCH Office 9141m²
20m Reticulated Road W/Ckwing
Existing 20m Wide Road
18m Wide Road
PROPOSED REALIGNMENT OF ELECTRICAL EASEMENT
(A) PROPOSED EASEMENT FOR ACCESS 10m WIDE
Denotes Riparian Corridor
Denotes Residential APZ (PBP 2016)
Denotes SFPP APZ (PBP 2019)
Denotes 1% AEP Flood Level at 32.2m
0 25 50 75 100
SCALE - 1:2000
REV
DESCRIPTION
BY
DATE
allen price & scarratts pty ltd
land and development consultants
SITE PLAN
OVER LOT 129 DP 3060, LOT 110 DP 131219
AND LOT 1 DP 520502
AT 25 MOSS VALE ROAD, BOMADERRY
FOR: SOUTHERN CROSS HOUSING
RATIO: 1:2000
(AT A3 ORIGINAL)
DATE OF PLAN:
01.10.2019
DRAWING NUMBER
N27790-SK6
SHEET 1
OF 1
REVISION
0

Reference: 2107
17 April 2020

Southwest Rocks Corporation
Edward Moran
4 Crystal Place
South West Rocks NSW 2431

Dear Edward,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT: 25 MOSS VALE ROAD, BOMADERRY, NEW SOUTH WALES

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.

As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the study area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences
- Review of site nature and distribution throughout the area surrounding the study area
- Review of site and material types along with their densities within the study area
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area
- Review of natural resources present within the study and their likely use by Aboriginal people
- Review of the relationships, both spatial and temporal in the local area

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

© 2021 Austral Archaeology

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the propose project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. This stage is complete

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

In order to fully assess the nature and extent of the archaeological deposit, Austral Archaeology have developed an archaeological testing methodology which follows the requirements of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the *CoP*) (DECCW 2010).

Our test excavation methodology is based on the *CoP* which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The *CoP* is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days.

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.

- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Dependant on the soils encountered and site conditions, material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and Cardno are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGIINAL CULTURAL HERITAGE ASSESSMENT REPORT

An ACHAR will be prepared that documents the assessment Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts. The ACHAR will be prepared in accordance with the Consultation Requirements, Code of Practice and *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (2010, 2010, Office of Environment and Heritage 2011).

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.

- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12 May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0429 038 258 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, The Archaeologists handbook, Allen & Unwin, NSW.

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

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

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

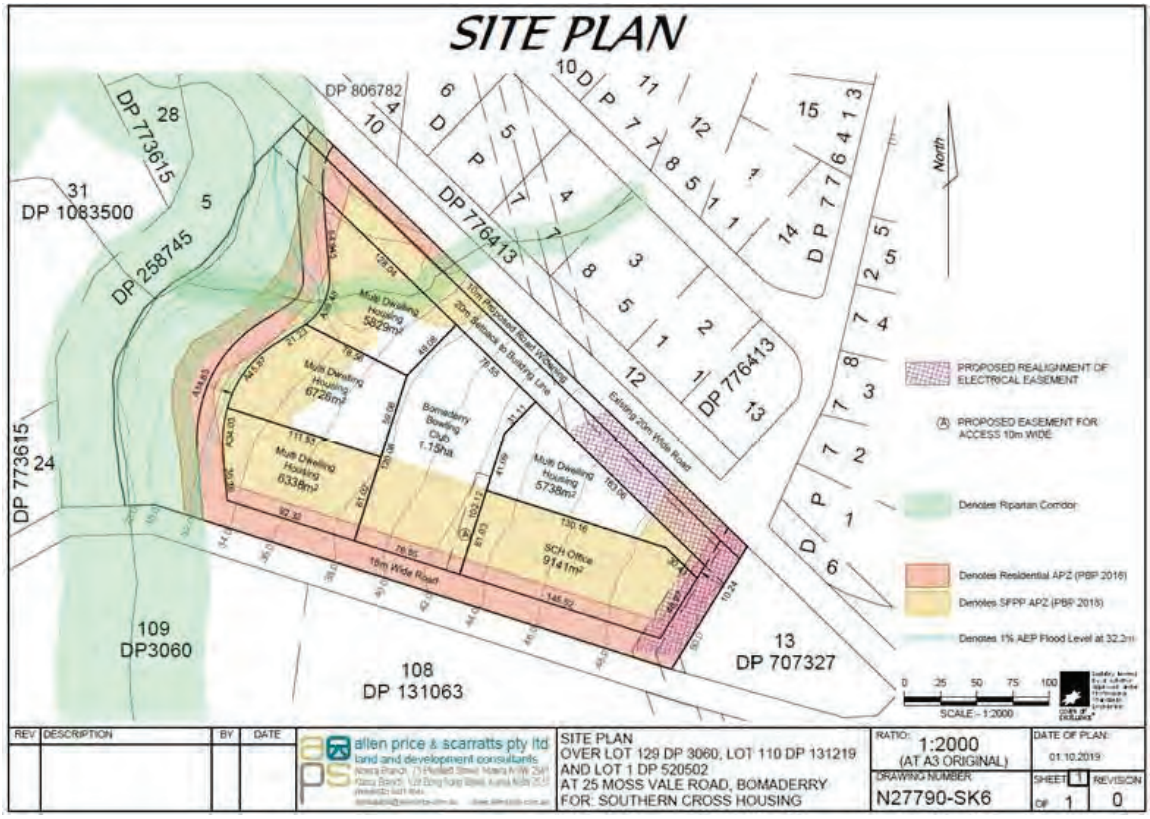


Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*


SITE PLAN
DP 806782
DP 773615
28
31
DP 1083500
5
DP 258745
DP 776413
DP 776413
DP 773615
24
109
DP3060
108
DP 131063
13
DP 707327
North
Multi Dwelling Housing 5893m²
Multi Dwelling Housing 6726m²
Multi Dwelling Housing 6338m²
Bomaderry Bowling Club 1.15ha
Multi Dwelling Housing 5738m²
SCH Office 9141m²
20m Reticulated Road W/Ckwing
Existing 20m Wide Road
18m Wide Road
PROPOSED REALIGNMENT OF ELECTRICAL EASEMENT
(A) PROPOSED EASEMENT FOR ACCESS 10m WIDE
Denotes Riparian Corridor
Denotes Residential APZ (PBP 2016)
Denotes SFPP APZ (PBP 2019)
Denotes 1% AEP Flood Level at 32.2m
0 25 50 75 100
SCALE - 1:2000
REV
DESCRIPTION
BY
DATE
allen price & scarratts pty ltd
land and development consultants
SITE PLAN
OVER LOT 129 DP 3060, LOT 110 DP 131219
AND LOT 1 DP 520502
AT 25 MOSS VALE ROAD, BOMADERRY
FOR: SOUTHERN CROSS HOUSING
RATIO: 1:2000
(AT A3 ORIGINAL)
DATE OF PLAN:
01.10.2019
DRAWING NUMBER
N27790-SK6
SHEET 1
OF 1
REVISION
0

Reference: 2107
17 April 2020

Ronald Carberry
13 Roseberry Park
Orient Point NSW 2540

Dear Ronald

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT: 25 MOSS VALE ROAD, BOMADERRY, NEW SOUTH WALES

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.

As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the study area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences
- Review of site nature and distribution throughout the area surrounding the study area
- Review of site and material types along with their densities within the study area
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area
- Review of natural resources present within the study and their likely use by Aboriginal people
- Review of the relationships, both spatial and temporal in the local area

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

© 2021 Austral Archaeology

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the propose project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. This stage is complete

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

In order to fully assess the nature and extent of the archaeological deposit, Austral Archaeology have developed an archaeological testing methodology which follows the requirements of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the *CoP*) (DECCW 2010).

Our test excavation methodology is based on the *CoP* which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The *CoP* is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days.

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.

- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Dependant on the soils encountered and site conditions, material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and Cardno are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGIINAL CULTURAL HERITAGE ASSESSMENT REPORT

An ACHAR will be prepared that documents the assessment Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts. The ACHAR will be prepared in accordance with the Consultation Requirements, Code of Practice and *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (2010, 2010, Office of Environment and Heritage 2011).

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.

- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12 May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0429 038 258 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, The Archaeologists handbook, Allen & Unwin, NSW.

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

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

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

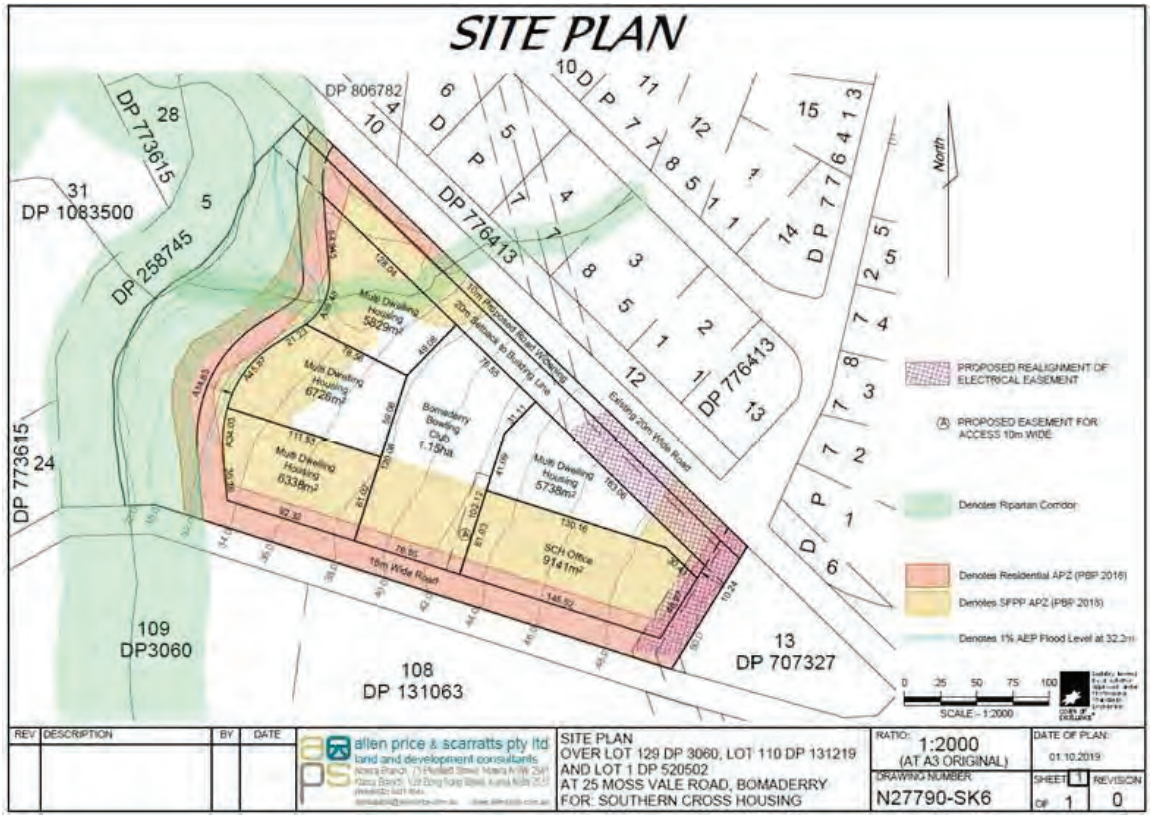


Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*


SITE PLAN
DP 806782
DP 773615
28
31
DP 1083500
5
DP 258745
DP 776413
DP 776413
DP 773615
24
109
DP3060
108
DP 131063
13
DP 707327
North
Multi Dwelling Housing 5893m²
Multi Dwelling Housing 6726m²
Multi Dwelling Housing 6338m²
Bomaderry Bowling Club 1.15ha
Multi Dwelling Housing 5738m²
SCH Office 9141m²
20m Reticulated Road W/Ckwing
Existing 20m Wide Road
18m Wide Road
PROPOSED REALIGNMENT OF ELECTRICAL EASEMENT
(A) PROPOSED EASEMENT FOR ACCESS 10m WIDE
Denotes Riparian Corridor
Denotes Residential APZ (PBP 2016)
Denotes SFPP APZ (PBP 2019)
Denotes 1% AEP Flood Level at 32.2m
0 25 50 75 100
SCALE - 1:2000
REV
DESCRIPTION
BY
DATE
allen price & scarratts pty ltd
land and development consultants
SITE PLAN
OVER LOT 129 DP 3060, LOT 110 DP 131219
AND LOT 1 DP 520502
AT 25 MOSS VALE ROAD, BOMADERRY
FOR: SOUTHERN CROSS HOUSING
RATIO: 1:2000
(AT A3 ORIGINAL)
DATE OF PLAN:
01.10.2019
DRAWING NUMBER
N27790-SK6
SHEET 1
OF 1
REVISION
0

4B: STAGE 2 & 3 RAP RESPONSES

From: Ryan Johnson
To: Hayley Hunter
Subject: RE: Stage 2/3 Mossvale Road
Date: Tuesday, 12 May 2020 1:03:18 PM
Attachments: image008.emz
image009.png

Dear Hayley
I have read the project information and methodology for the above project, I endorse the recommendations made.
Kind regards

Ryan Johnson | **Murra Bidgee Mullangari**



Aboriginal Corporation Cultural Heritage

A: PO Box 246, Seven Hills, NSW, 2147
E: murrabidgeemullangari@yahoo.com.au
ICN: 8112

Note: Privileged/Confidential information may be contained in this message and may be subject to legal privilege. Access to this e-mail by anyone other than the intended is unauthorised. If you are not the intended recipient (or responsible for delivery of the message to such person), you may not use, copy, distribute or deliver to anyone this message (or any part of its contents) or take any action in reliance on it. In such case, you should destroy this message, and notify us immediately. If you have received this email in error, please notify us immediately by e-mail or telephone and delete the e-mail from any computer. If you or your employer does not consent to internet e-mail messages of this kind, please notify us immediately. All reasonable precautions have been taken to ensure no viruses are present in this e-mail. As our company cannot accept responsibility for any loss or damage arising from the use of this e-mail or attachments we recommend that you subject these to your virus checking procedures prior to use. The views, opinions, conclusions and other informations expressed in this electronic mail are not given or endorsed by the company unless otherwise indicated by an authorized representative independent of this message.

From: Hayley Hunter [mailto:hayleyh@australarch.com.au]
Sent: Friday, 17 April 2020 4:45 PM
To: murrabidgeemullangari@yahoo.com.au
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Darleen Johnson
Dear Darleen,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley
Senior Archaeologist
Austral Archaeology Pty Ltd
ABN: 55 629 860 975
M: 0429 038 258
E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

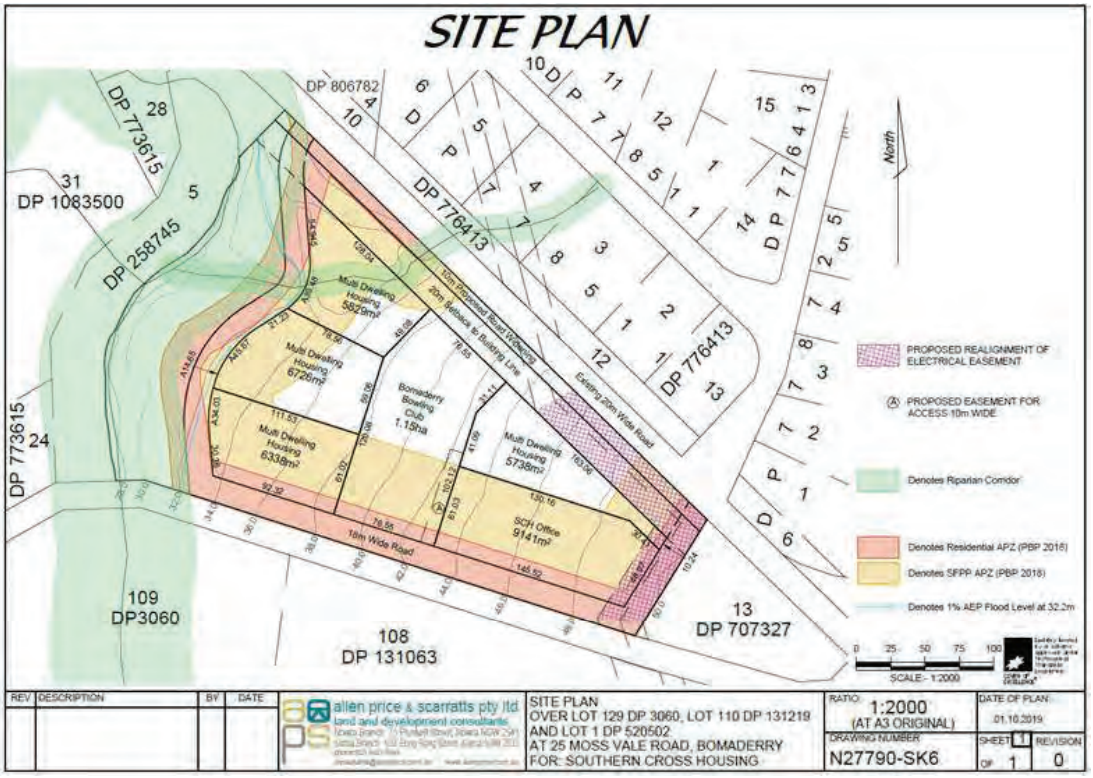


Figure 2. Proposed Development

From: Lee Field
To: Hayley Hunter
Subject: Re: Stage 2/3 Mossvale Road
Date: Thursday, 30 April 2020 4:43:09 PM

Dear Hayley

I on behalf of Barraby have reviewed and agrees with the methodology associated with this project.

Thanks
Lee Field

On 17 Apr 2020, at 4:43 pm, Hayley Hunter <hayleyh@australarch.com.au> wrote:

Reference: 2007
17 April 2020

Lee Field
NSW
Dear Lee,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the*Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place

- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,

<image001.jpg>

Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

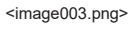
Department of Environment, Climate Change and Water 2010, 'Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales'.

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

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

<image004.jpg>

<image005.jpg>
Figure 2. Proposed Development


<image003.png>

From: Leanne Tungai
To: Hayley Hunter
Subject: Re: Stage 2/3 Mossvale Road
Date: Friday, 17 April 2020 5:38:14 PM
Attachments: image002.emz
image003.png

Thank you for the information.
Please register my group Leanne Tungai for work on this project thank you.
Leanne Tungai
0478157604

On Fri, 17 Apr. 2020, 4:45 pm Hayley Hunter, <hayleyh@australarch.com.au> wrote:

Reference: 2007

17 April 2020

Leanne Tungai

Dear Leanne,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.

As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.

- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.

- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.

- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.

    - Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
    - Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.

- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the

appropriate authority managing the Local Government Area is to be approached and informed.

- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.

- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,

Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

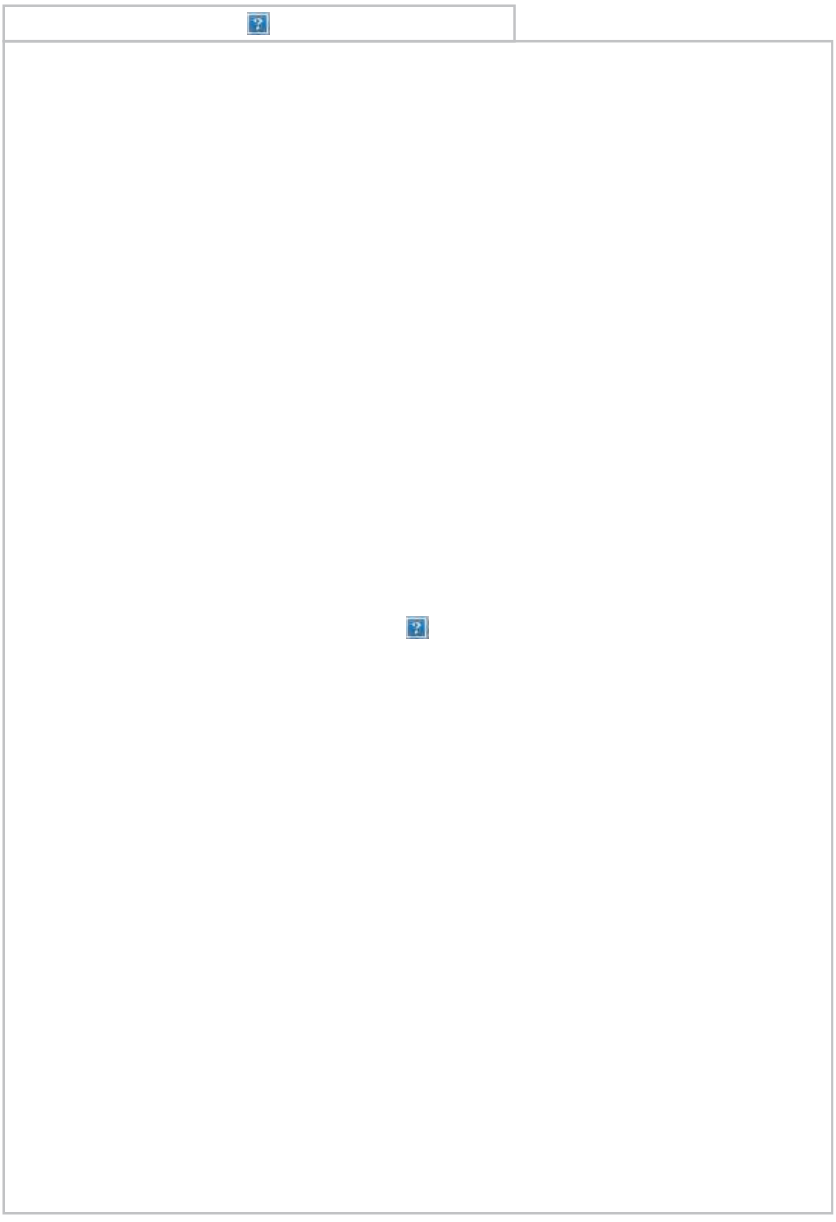
7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



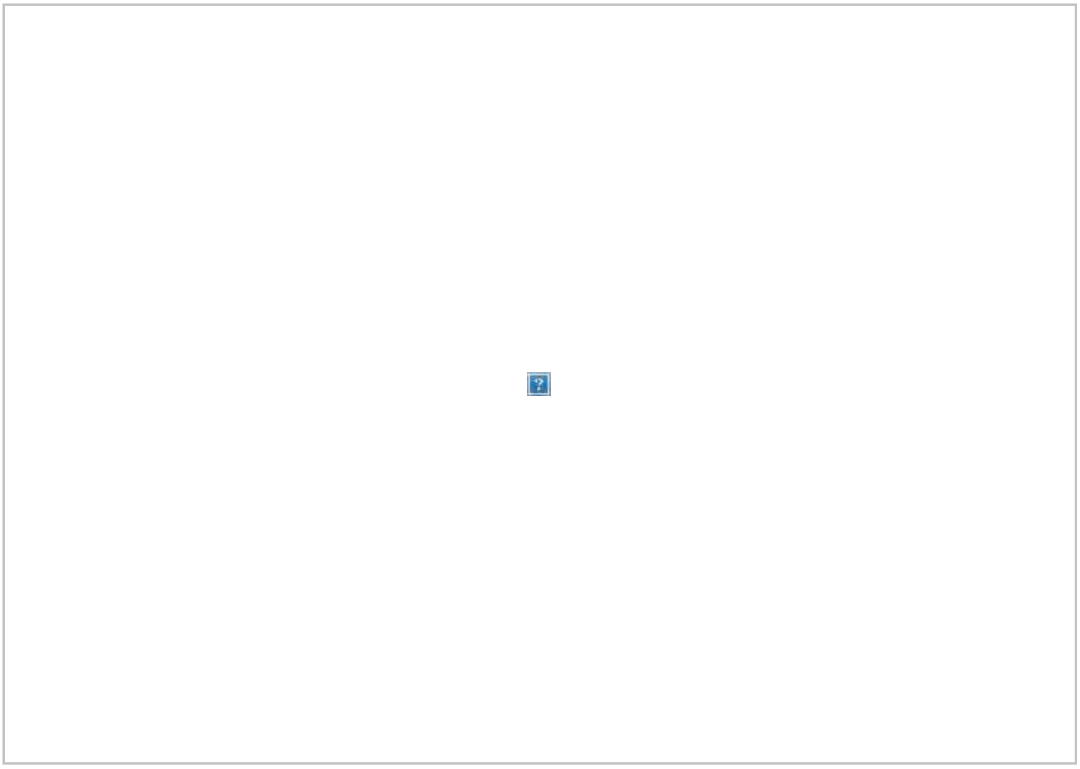


Figure 2. Proposed Development

Marika Low

From: Hayley Hunter
Sent: Monday, 27 April 2020 3:05 PM
To: G W
Subject: RE: Stage 2/3 Mossvale Road

Hi Gayle,

Thanks for your email. Yes, the information has been sent to all RAPs as required by Stages 4.2 and 4.3 of the consultation guidelines.

Regards ,Hayley

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W:
https://www.australarchaeology.com.au





Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: G W <gayle.w@hotmail.com>
Sent: Monday, 27 April 2020 12:52 PM
To: Hayley Hunter <hayleyh@australarch.com.au>
Subject: Re: Stage 2/3 Mossvale Road

Good afternoon Hayley,

Please advise if the below information has been emailed to other RAP's also.

Regards
Gayle Watts

From: Hayley Hunter <hayleyh@australarch.com.au>
Sent: Friday, 17 April 2020 4:45 PM

To: gayle.w@hotmail.com <gayle.w@hotmail.com>
Subject: Stage 2/3 Mossvale Road

Reference: 2007

17 April 2020

Gayle Watts

Dear Gayle,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.

As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.

- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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

Figure 1. Proposed Test Pit Locations



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY



Figure 2. Proposed Development

From: G W
To: Hayley Hunter
Subject: Re: Stage 2/3 Mossvale Road
Date: Monday, 27 April 2020 12:52:19 PM
Attachments: image003.png

Good afternoon Hayley,

Please advise if the below information has been emailed to other RAP's also.

Regards
Gayle Watts

From: Hayley Hunter <hayleyh@australarch.com.au>
Sent: Friday, 17 April 2020 4:45 PM
To: gayle.w@hotmail.com <gayle.w@hotmail.com>
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Gayle Watts
Dear Gayle,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.

- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.

- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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

Figure 1. Proposed Test Pit Locations



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

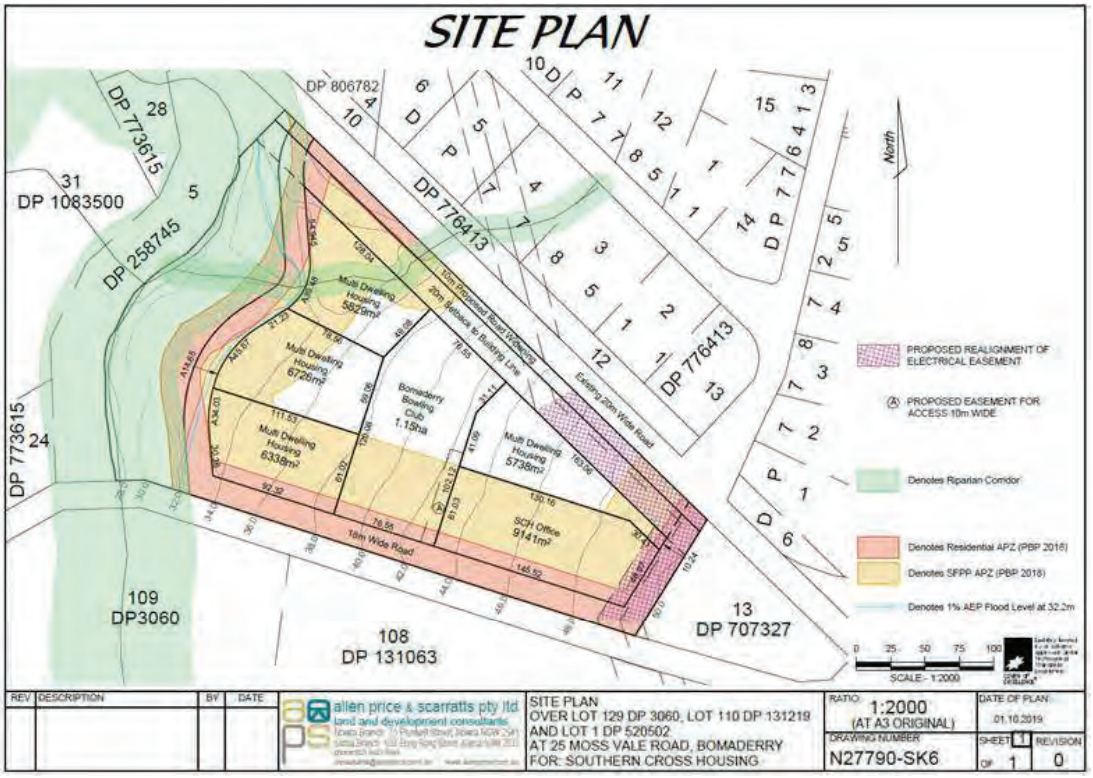


Figure 2. Proposed Development

From: yurrandaali_cs@outlook.com
To: Hayley Hunter
Subject: Re: Stage 2/3 Mossvale Road
Date: Wednesday, 22 April 2020 8:20:50 PM

Dear Hayley

Yurrandaali Pty Ltd has read and agrees with the methodology for this project

Thanks
Bo Field

On 17 Apr. 2020 4:45 pm, Hayley Hunter <hayleyh@australarch.com.au> wrote:

Reference: 2007

17 April 2020

Bo Field

NSW

Dear Bo,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.

As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.

- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.

- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.

- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.

    - Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
    - Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.

- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal

archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.

- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.

- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,

Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

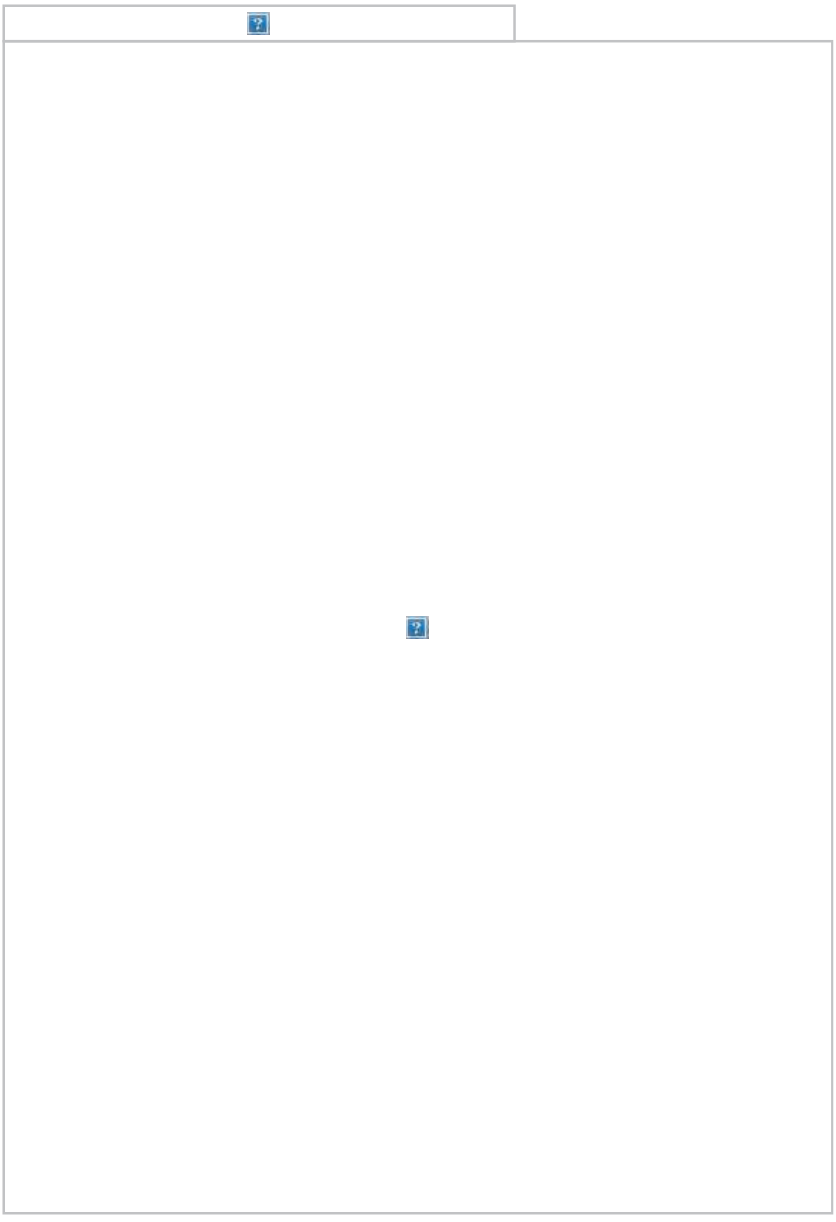
7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



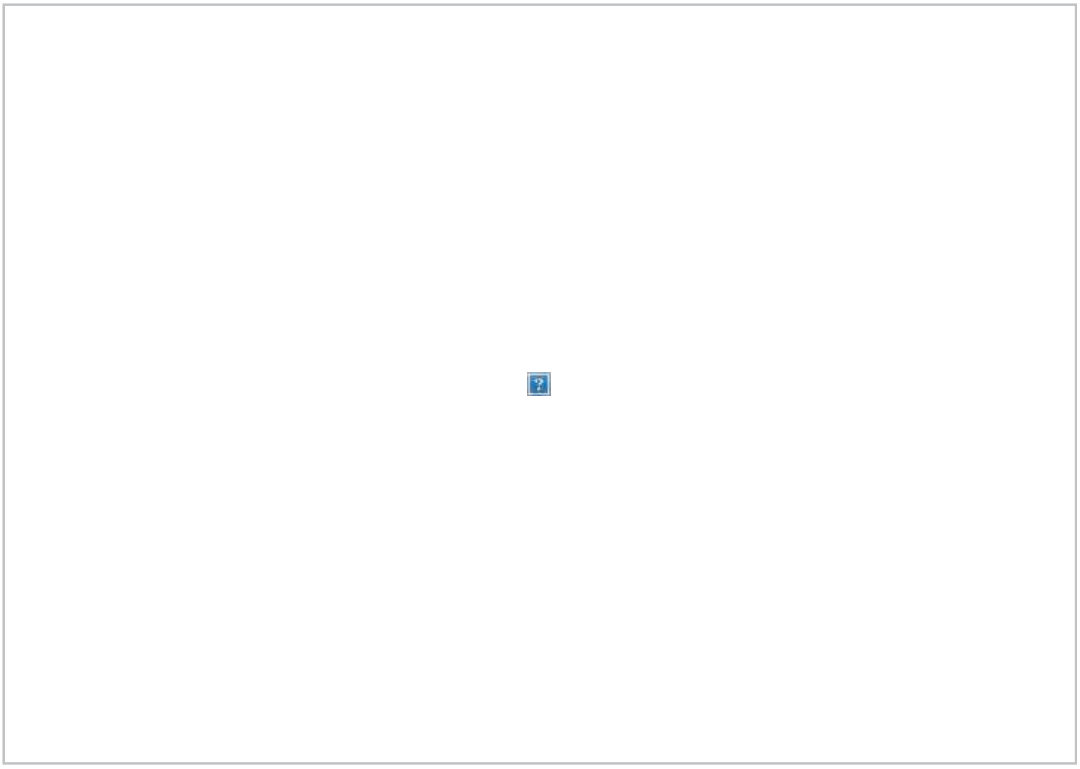


Figure 2. Proposed Development

From: Blaan Davies
To: Hayley Hunter
Subject: Re: Stage 2/3 Mossvale Road
Date: Tuesday, 21 April 2020 9:41:12 PM
Attachments: image003.png

Hi Hayley, thank you for providing me relevant information for the proposed project regarding culture and heritage assessment at 25 Moss Vale Road, Bomaderry.

I have read the report and the proposed methodologies and understanding of Culture and heritage contained for this site. I appreciate that the report has identified associated site near and far that identify the Aboriginal identity of this geographical area. If you require further understanding of Aboriginal involvement past and present history to this site please do not hesitate to make further inquiry.

I would like to make connection the site excavation and fulfill this AHIP procedure to enable my engagement with the proponent in test excavation employment.

regards

Blaan Davies
Yuin/Eloura Nation
Wodi-Wandian
Dhwaral Custodian
Eastern, South Coast Peoples
bd875@uowmail.edu.au
0413208344

From: Hayley Hunter <hayleyh@australarch.com.au>
Sent: Friday, 17 April 2020 4:45 PM
To: Blaan Davies <bd875@uowmail.edu.au>
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Blaan Davis
Dear Blaan,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.
As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. ABORIGINAL CULTURAL HERITAGE CONSUTATION

The Aboriginal people of Australia are part of the oldest and continuous living cultures in human history. Aboriginal people's cultural heritage is recognised and valued as a unique and essential component of the identity of all Australian people.

Aboriginal cultural heritage provides the essential links between the past and the present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country.

The objective of community consultation is to ensure Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal objects and/or place
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to DPIE.

To meet these objectives Department of Planning, Industry and Environment (DPIE) [formally OEH & DECCW] have developed four stages of consultation which must be met for each cultural heritage assessment. There are a number of mandatory timeframes associated with the Consultation Requirements, these are summarised in Table 1.

Table 1: Statutory timeframes for consultation.

Stage	Timeframe
Stage 1: Notification of project proposal and registration of interest	14 days
Stage 2: Presentation of information about the proposed project	28 days
Stage 3: Gathering information about cultural significance.	28 days
Stage 4: Review of the draft cultural heritage assessment report.	28 days

**Note: Stage 2 and 3 are combined in this document and one 28 day period applies.*

As per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Section 3.4 on page 9 states that "Consultation should not be confused with employment". The proponent is therefore not obliged to employ any registered stakeholders for the fieldwork component of this project. However, all registered Aboriginal parties will be fully consulted as per the guidelines.

The following section outlines the expected feedback required from Aboriginal people for each Stage of the consultation process.

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

Input required: Register your interest in the project by email, phone or letter. **This stage is complete.**

Stage 2: Presentation of information about the proposed project.

Input required: Feedback on the project proposal including the nature, scope and methodology. Raise any concerns about cultural perspectives or assessment requirements.

Stage 3: Gathering information about cultural significance.

Input required: Contribute to culturally appropriate information gathering and the research methodology. Provide information that will enable the cultural significance of Aboriginal objects and/or places within the proposed project area. Have input into the development of any cultural heritage management options.

Stage 4: Review of the draft cultural heritage assessment report.

Input required: Provide feedback on any aspect of the draft ACHA report.

5. EXCAVATION STRATEGY

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all "test excavations must be excavated using

hand tools only" and "the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented" (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area's overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

6. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.
- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

7. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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

Figure 1. Proposed Test Pit Locations



Figure 18 - Proposed Test Pits within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap *Drawn by: WA Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

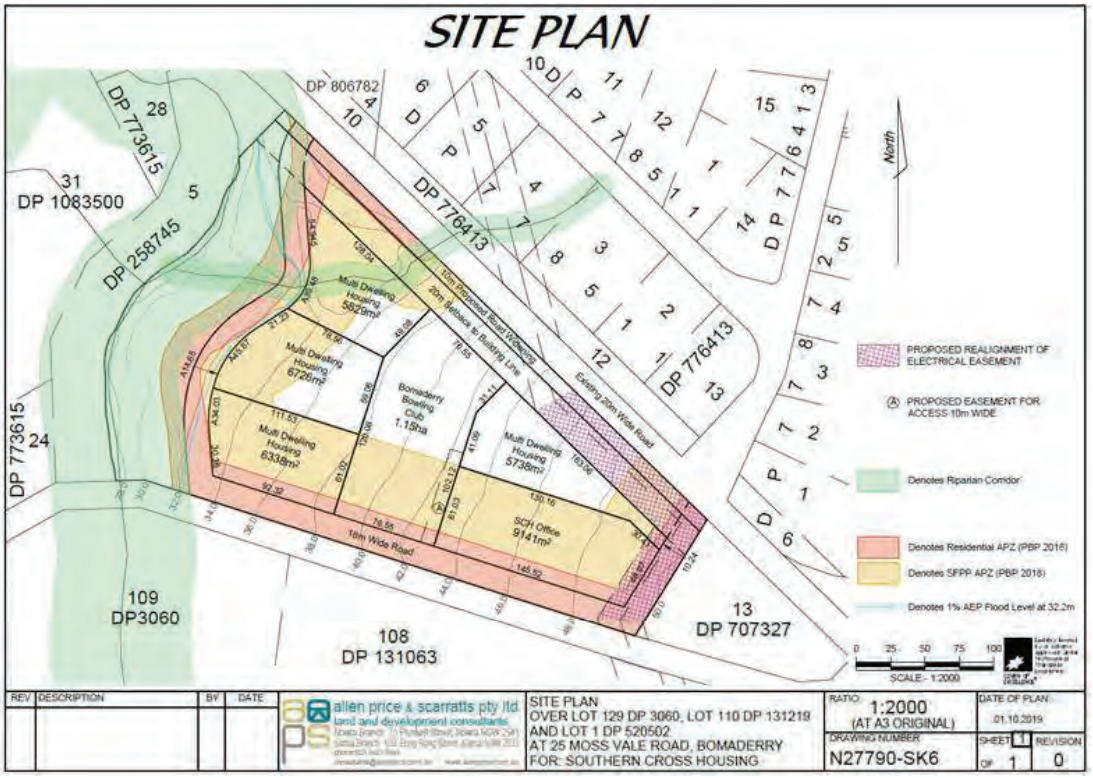


Figure 2. Proposed Development

4C: PROJECT UPDATE – 15 OCTOBER 2020

From: Hayley Hunter
To: "barrabyculturalservices@gmail.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:22:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: barrabyculturalservices@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Lee Field
NSW
Dear Lee,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: "bblalc@bigpond.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:22:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: bblalc@bigpond.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Colin Davis
NSW
Dear Colin,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: biamangachts@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:22:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: biamangachts@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Seli Storer
Dear Seli,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: "bilingachts@gmail.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:22:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: bilingachts@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Simalene Carriage
Dear Simalene,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: nuragunyu@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:22:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: nuragunyu@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Noel Butler
Dear Noel,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: darrylcaines8@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:22:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: darrylcaines8@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Darryl Caines
NSW
Dear Darryl,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: garycaines87@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:22:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: garycaines87@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Gary Caines
NSW
Dear Gary,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: "cullendullachts@gmail.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:22:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: 'cullendullachts@gmail.com' <cullendullachts@gmail.com>
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Corey Smith
Dear Corey,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: daruglandobservations@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:21:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: 'daruglandobservations@gmail.com' <daruglandobservations@gmail.com>
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Anna O'Hara
NSW
Dear Anna,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: dharugchts@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:21:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: dharugchts@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Andrew Bond
Dear Andrew,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: "gordy2540@hotmail.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:21:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: gordy2540@hotmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Gordon Campbell
Dear Gordon,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: bunjilsmith@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:21:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: bunjilsmith@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Basil Smith
NSW
Dear Basil,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: oldmanwisdomgumaraa@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:21:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: oldmanwisdomgumaraa@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Lisa Bazzano
Dear Lisa,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: gundungurratectribsevices@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:21:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: gundungurratectribsevices@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Sam Wickman
Dear Sam,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: "gunyuuchts@gmail.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:21:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: 'gunyuuchts@gmail.com' <gunyuuchts@gmail.com>
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Kylie Ann Bell
Dear Kylie Ann,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: richardcampbell123@outlook.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:21:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: 'richardcampbell123@outlook.com' <richardcampbell123@outlook.com>
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Richard Campbell
NSW
Dear Richard,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: "jerringong@gmail.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:20:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: jerringong@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Jodi Anne Stewart
NSW
Dear Jodi Anne,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: jlalc@bigpond.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:20:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: jlalc@bigpond.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Alfred Wellington
NSW
Dear Alfred,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: "karrialchts@gmail.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:20:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: karrialchts@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Karrial Johnson
Dear Karrial,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: munyungachts@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:20:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: munyungachts@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Kaya Dawn Bell
Dear Kaya Dawn,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: murramarangchts@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:20:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: murramarangchts@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Roxanne Smith
Dear Roxanne,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: "murrabidgeemullangari@yahoo.com.au"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:20:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: murrabidgeemullangari@yahoo.com.au
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Ryan Johnson
Dear Ryan,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: murrabidgeemullangari@yahoo.com.au
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:20:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: 'murrabidgeemullangari@yahoo.com.au' <murrabidgeemullangari@yahoo.com.au>
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Darleen Johnson
Dear Darleen,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: "murrumbul@gmail.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:20:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: 'murrumbul@gmail.com' <murrumbul@gmail.com>
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Mark Henry
Dear Mark,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: nowralalc@bigpond.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:20:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: nowralalc@bigpond.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

NSW
Dear Sir or Madam,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: nundagurri@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:19:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: nundagurri@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Newton Carriage
Dear Newton,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: pemulwuyd@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:19:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: pemulwuyd@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Pemulwuy Johnson
Dear Pemulwuy,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: "owen.fpfs@gmail.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:19:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: owen.fpfs@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Owen Carriage
Dear Owen,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: thoorganura@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:19:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: thoorganura@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

John Carriage
NSW
Dear John,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: lbjwright1977@hotmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:19:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: 'lbjwright1977@hotmail.com' <lbjwright1977@hotmail.com>
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Leonard Wright
NSW
Dear Leonard,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: "troytungai72@outlook.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:19:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: 'troytungai72@outlook.com' <troytungai72@outlook.com>
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Troy Tungai
NSW
Dear Troy,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: leannecaroltungai@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:19:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: leannecaroltungai@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Leanne Tungai
Dear Leanne,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: admin@ulladullalalc.com.au
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:19:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: admin@ulladullalalc.com.au
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

NSW
Dear Sir or Madam,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: "Walbunja@gmail.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:19:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: Walbunja@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Hika Te Kowhai
NSW
Dear Hika Te,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: walgaluchts@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:19:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: walgaluchts@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Ronald Stewart
Dear Ronald,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: warrabingi@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:19:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: warrabingi@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Nathanial Kennedy
Dear Nathanial,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: gayle.w@hotmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:19:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: 'gayle.w@hotmail.com' <gayle.w@hotmail.com>
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Gayle Watts
Dear Gayle,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: "noelwebster2@bigpond.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:18:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: 'noelwebster2@bigpond.com' <noelwebster2@bigpond.com>
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Noel Webster
NSW
Dear Noel,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: "wingikarachts@gmail.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:18:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: wingikarachts@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Hayley Bell
Dear Hayley,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: wullunglb@gmail.com
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:18:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: wullunglb@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Lee-Roy James Boota
NSW
Dear Lee-Roy James,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: bd875@uow.edu.au
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:18:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: bd875@uow.edu.au
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Blaan Davis
Dear Blaan,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

From: Hayley Hunter
To: "yurrandaali_cs@outlook.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:18:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM
To: yurrandaali_cs@outlook.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Bo Field
NSW
Dear Bo,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

From: Hayley Hunter
To: G W
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:18:00 PM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png
image007.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Monday, 27 April 2020 3:05 PM
To: G W <gayle.w@hotmail.com>
Subject: RE: Stage 2/3 Mossvale Road

Hi Gayle,

Thanks for your email. Yes, the information has been sent to all RAPs as required by Stages 4.2 and 4.3 of the consultation guidelines.

Regards ,Hayley

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
To: "baduchts@gmail.com"
Subject: RE: Stage 2/3 Mossvale Road
Date: Thursday, 15 October 2020 2:22:00 PM
Attachments: image006.png
image007.png
image008.png
image009.png
image010.png
image012.emz
image001.png

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:44 PM
To: baduchts@gmail.com
Subject: Stage 2/3 Mossvale Road

Reference: 2007
17 April 2020

Karia Lea Bond
NSW
Dear Karia Lea,,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to you as you have registered your interest as a Registered Aboriginal Party (RAP) for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales. This letter provides project information and a methodology for the preparation of an Aboriginal Cultural Heritage Assessment (ACHA) for the study area. This information is being requested in accordance with Stages 2 and 3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW 2010) [DECCW].

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal*

Reference: 2107
10 October 2020

Southwest Rocks Corporation
Edward Moran
4 Crystal Place
South West Rocks NSW 2431

Dear Edward,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT: 25 MOSS VALE ROAD, BOMADERRY, NEW SOUTH WALES

I am writing to inform you that Austral is continuing to undertake the Aboriginal Cultural Heritage Assessment for 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales.

This project is still ongoing and we will keep you informed of any developments.

Please do not hesitate to contact me on 0429 038 258 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

Reference: 2107
10 October 2020

Shoalhaven Elders and Friends Organisation
Gordon Wellington
1 Roma Close
Bomaderry Rocks NSW 2541

Dear Gordon,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT: 25 MOSS VALE ROAD, BOMADERRY, NEW SOUTH WALES

I am writing to inform you that Austral is continuing to undertake the Aboriginal Cultural Heritage Assessment for 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales.

This project is still ongoing and we will keep you informed of any developments.

Please do not hesitate to contact me on 0429 038 258 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

Reference: 2107
10 October 2020

Ronald Carberry
13 Roseberry Park
Oran Point NSW 2540

Dear Ronald,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT: 25 MOSS VALE ROAD, BOMADERRY, NEW SOUTH WALES

I am writing to inform you that Austral is continuing to undertake the Aboriginal Cultural Heritage Assessment for 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales.

This project is still ongoing and we will keep you informed of any developments.

Please do not hesitate to contact me on 0429 038 258 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

4D: RAP RESPONSES TO PROJECT UPDATE – 15 OCTOBER 2020

From: Blaan Davies <bd875@uowmail.edu.au>
Sent: Friday, 16 October 2020 11:41 AM
To: Hayley Hunter
Subject: Re: Stage 2/3 Mossvale Road

Hi Hayley, thanks for the update.

If you foresee any future field work for this site please do not hesitate to contact me.

Regards

Get Outlook for Android

From: Hayley Hunter <hayleyh@australarch.com.au>
Sent: Thursday, October 15, 2020 1:18:52 PM
To: Blaan Davies <bd875@uowmail.edu.au>
Subject: RE: Stage 2/3 Mossvale Road

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Leanne Tungai <leannecaroltungai@gmail.com>
Sent: Thursday, 15 October 2020 6:20 PM
To: Hayley Hunter
Subject: Re: Stage 2/3 Mossvale Road

Thank you for the update.

On Thu, 15 Oct 2020 at 2:19 pm, Hayley Hunter <hayleyh@australarch.com.au> wrote:

> Hi,
>
> We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.
>
> Any questions please feel free to contact me.
>
> Kind Regards,
>
> **Hayley Hunter**
> Personal Assistant
>
> M: 0418973444
>
> P:03 5052 6617
> E: hayleyh@australarch.com.au
>
> W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

Reference: 2107
10 October 2020

Minnamunnung
Aaron Broad
1 Waratah Avenue
Albion Park Rail NSW 2527

Dear Aaron,

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT: 25 MOSS VALE ROAD, BOMADERRY, NEW SOUTH WALES

I am writing to inform you that Austral is continuing to undertake the Aboriginal Cultural Heritage Assessment for 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales.

This project is still ongoing and we will keep you informed of any developments.

Please do not hesitate to contact me on 0429 038 258 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

From: richardcampbell123@outlook.com
Sent: Thursday, 15 October 2020 2:26 PM
To: Hayley Hunter
Subject: RE: Stage 2/3 Mossvale Road

Hi Hayley,

Thanks for the email and keep me posted with the process an I am looking forward to fieldworks.

Kindest regards

Richard

On 15 Oct. 2020 2:21 pm, Hayley Hunter <hayleyh@australarch.com.au> wrote:

> Hi,
>
> We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.
>
> Any questions please feel free to contact me.
>
> Kind Regards,
>
> **Hayley Hunter**
> Personal Assistant
>
> M: 0418973444
>
> P:03 5052 6617
> E: hayleyh@australarch.com.au
>
> W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Troy Tungai <Troytungai72@outlook.com>
Sent: Friday, 16 October 2020 2:05 AM
To: Hayley Hunter
Subject: Re: Stage 2/3 Mossvale Road

Hi hayley
Thanks for your email yes i have read the methodology and i agree with it thanks troy

Sent from Outlook

From: Hayley Hunter <hayleyh@australarch.com.au>
Sent: Thursday, 15 October 2020 2:19 PM
To: troytungai72@outlook.com <troytungai72@outlook.com>
Subject: RE: Stage 2/3 Mossvale Road

Hi,

We are writing to inform you that Austral have been undertaking the Aboriginal Cultural Heritage Assessment for the proposed development at 25 moss vale road (lot 129 dp 3060, lot110 dp 131219 and lot 1 dp 520502) Bomaderry NSW. The project is still ongoing and we will keep you informed of any Developments.

Any questions please feel free to contact me.

Kind Regards,

Hayley Hunter
Personal Assistant

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Hayley Hunter
Sent: Friday, 17 April 2020 4:45 PM

4E: FIELDWORK INVITES AND RAP RESPONSES – JANUARY 2021

Pauline Ramsey

From: Pauline Ramsey
Sent: 14 January, 2021 5:28 PM
To: troytungai72@outlook.com
Subject: 2109_25 Moss Vale Road Bomaderry NSW_Testing_SA
Attachments: 2109_Troy Tungai Service Agreement for Testing_PR_202101124.pdf

Dear Troy,

Please find attached a copy of the service agreement for the upcoming fieldwork at 25 Moss Vale Road, Bomaderry NSW. We will meet in the parking area within the property. Work will start at 8 am and finish at 4pm. Please return the service agreement signed, at your earliest convenience. If you have any questions do not hesitate to get in touch at the details provided below.

Sincerely,

Pauline Ramsey
Archaeologist
BA. Anthro. & I.D.S.

M: 0419 264 344
P: 02 9568 6701
E: pauliner@australarch.com.au

AUSTRAL ARCHAEOLOGY

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

Austral Archaeology uses virus scanning software but accepts no liability for viruses or similar in any electronic correspondence and/or attachment.

Pauline Ramsey

From: Leanne Tungai <leannecaroltungai@gmail.com>
Sent: 12 January, 2021 1:56 PM
To: Pauline Ramsey
Cc: Alexander Beben
Subject: Re: 2109_Moss Vale Road Testing

Yes, I will be able to attend.

On Tue, 12 Jan 2021 at 8:58 am, Pauline Ramsey <pauliner@australarch.com.au> wrote:

> Dear Leanne,
>
> On behalf of Austral I would like to invite you to join us in undertaking an archaeological testing program at 21 Moss Vale Road in Bomaderry between the 18th and 21st of January 2021. Please let us know of your availabilities as soon as possible.
>
> Sincerely,

Pauline Ramsey
Archaeologist

BA. Anthro. & I.D.S.

M: 0419 264 344
P: 02 9568 6701
E: pauliner@australarch.com.au



Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

Austral Archaeology uses virus scanning software but accepts no liability for viruses or similar in any electronic correspondence and/or attachment.

Pauline Ramsey

From: nowralalc@bigpond.com
Sent: Monday, 1 February 2021 9:46 AM
To: Pauline Ramsey
Subject: RE: 2109_25 Moss Vale Road Testing

Thanks Pauline.
Moving forward (and understanding client pressures you're under), it would be great for us to get more notice than this of upcoming work. It's often difficult for a range of reasons for us to have site workers ready at short notice.
Thanks again
Nicole

From: Pauline Ramsey <pauliner@australarch.com.au>
Sent: Friday, 29 January 2021 11:13 AM
To: nowralalc@bigpond.com
Subject: RE: 2109_25 Moss Vale Road Testing

Hi Nicole,

I'm sorry we could not reach you before works started. Testing was undertaken all of last week and on Wednesday this week with two other groups. A Total of 29 test pits were dug, including one test pit which was expanded into a 1m by 1m square. We found 104 artefacts within the area. We have yet to perform a formal analysis on the artefacts, but all conclusions will be included in the upcoming report. If you have any questions please do not hesitate to get in touch.

Kind Regards,

Pauline Ramsey
Archaeologist
BA. Anthro. & I.D.S.

M: 0419 264 344
P: 02 9568 6701
E: pauliner@australarch.com.au

AUSTRAL ARCHAEOLOGY

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

Austral Archaeology uses virus scanning software but accepts no liability for viruses or similar in any electronic correspondence and/or attachment.

From: nowralalc@bigpond.com <nowralalc@bigpond.com>
Sent: Tuesday, 19 January 2021 3:35 PM
To: Pauline Ramsey <pauliner@australarch.com.au>
Subject: RE: 2109_25 Moss Vale Road Testing

Good afternoon Pauline,
I'm just writing to apologise that I missed this – was off sick last week. Please keep us updated as to how the project is going, and sorry again.

Nicole Moore
Chief Executive Officer
Nowra Local Aboriginal Land Council
59 Beinda Street | PO Box 2049 | Bomaderry NSW 2541
P 02 4423 3163 | F 02 4423 0083 | M 0455 053 300 | E nowralalc@bigpond.com

---

From: Pauline Ramsey <pauliner@australarch.com.au>
Sent: Tuesday, 12 January 2021 9:39 AM
To: nowralalc@bigpond.com.au
Cc: Alexander Beben <alexb@australarch.com.au>
Subject: 2109_25 Moss Vale Road Testing

To whom it may concern,

On behalf of Austral Archaeology, we would like to invite the Nowra Local Aboriginal Land Council to participate in the Aboriginal archaeological testing program being undertaken at 25 Moss Vale Road in Bomaderry NSW, between the 18th and 21st of January 2021. Please let us know as soon as possible if you have an officer available. If you have any questions do not hesitate to get in touch at the details provided below.

Sincerely,

Pauline Ramsey
Archaeologist
BA. Anthro. & I.D.S.

M: 0419 264 344
P: 02 9568 6701
E: pauliner@australarch.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

Austral Archaeology uses virus scanning software but accepts no liability for viruses or similar in any electronic correspondence and/or attachment.

4F: NOTICE TO HERITAGE NSW OF PROPOSED TEST EXCAVATIONS

Reference: 2109
18 December 2020

Heritage NSW
Locked Bag 5020
Parramatta NSW 2124

RE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED DEVELOPMENT AT 25 MOSS VALE ROAD (LOT 129 DP 3060, LOT110 DP 131219 AND LOT 1 DP 520502) BOMADERRY NSW

I am writing to notify Heritage NSW of the upcoming Aboriginal test excavation at for the proposed development at 25 Moss Vale Road (Lot 129 DP 3060, Lot110 DP 131219 and Lot 1 DP 520502), Bomaderry, New South Wales as part of an ongoing Aboriginal Cultural Heritage Assessment (ACHA). This advice is intended to fulfill the obligations outlined in requirement 15c of *Code of Practice for the Protection of Aboriginal Objects in NSW* (Department of Environment Climate Change and Water 2010).

1. PROJECT DETAILS

Austral Archaeology has been commissioned by Allen Price and Scarratts to undertake an ACHA for the proposed development at 25 Moss Vale Road, Bomaderry, NSW. The project involves the development of a neighbourhood plan to be submitted for a Development Application (DA) to Nowra City Council for the eventual residential subdivision of the acquired land.

James Harris (town planner, Allen Price and Scarratts) is the legal entity with overall responsibility for the project. His contact details are as follows:

James Harris

75 Plunkett Street

Nowra, NSW, 2541

Phone: 02 4421 6544

Email: jamesharris@allenprice.com.au

Austral is proposing to prepare an ACHA report that will present a robust predictive model and test excavations within the study area prepared under the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water 2010) [the Code of Practice] and consultation with Aboriginal stakeholders in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water NSW 2010). The purpose of this ACHA will be to advise on the potential nature of Aboriginal cultural material present in the study area, the potential impact that the proposed development may have on Aboriginal cultural material, and to make relevant management recommendations. The ACHA will also meet the requirements of the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

2. PROJECT BACKGROUND

A previous Aboriginal Technical Report (AAT) investigation was completed by Austral Archaeology (Austral 2020). To understand the study area a walking survey was undertaken, targeting areas of exposure. This was completed on all landforms which exhibited areas of exposure.. Due to low visibility no aboriginal objects or sites were found, however, two areas of moderate archaeological potential were identified; one along the river terrace abutting Bomaderry Creek, and the other on the gentle slope in the central section of the study area.

No on-ground information could be found to support this hypothesis though, as high grass obscured the surface of virtually the entirety of the undisturbed areas. The exception being along the fence lines where a limited amount of visibility and exposure was present, although this was caused by cattle trampling the area, as such it was also highly disturbed.

As the investigation found two areas of moderate archaeological potential, the report recommended that further assessment should be performed if impacts are to occur to these areas. As the proposed development will impact these areas potential, it is a requirement that an ACHA be completed and further assessment in the form of subsurface archaeological testing be undertaken.

Austral has developed the following predictive model and proposes to complete a series of test excavations to determine the whether sub-surface Aboriginal objects or other archaeological evidence is present within the study area.

The four most commonly recorded site types within five kilometres of the syudy area are artefacts (either single stone artefacts or artefact scatters), Potential Archaeological Deposits (PADs), artefacts/PADS and artefact open campsites. These four site types account for nearly 80% of all site types near the study area. Therefore, during the sub-surface testing it is probable that the main site type encountered will be stone artefacts either as isolated artefacts or artefact scatters.

3. PREDICTIVE MODEL

The following model has been developed to try and predict the nature and extent of Aboriginal cultural heritage within the study area:

- Consultation with local Aboriginal groups, drawing on their knowledge of the local area and past experiences.
- Review of site nature and distribution throughout the area surrounding the study area.
- Review of site types and material types along with their densities within the study area.
- Review of ethnographic sources to ascertain what and if material traces are likely found within the study area.
- Review of natural resources present within the study and their likely use by Aboriginal people.
- Review of the relationships, both spatial and temporal in the local area.

4. EXCAVATION STRATEGY

Pauline Ramsey (archaeologist, Austral) will be conducting the testing excavations. Her contact details are as follows:

Pauline Ramsey

PO Box 152

Albion Park, NSW, 2527

Phone: 0419 264 344

Email: pauliner@australarch.com.au

The test excavations is expected to start on 18 January 2021 and finish on 22 January 2021.

To fully assess the nature and extent of the archaeological deposit, Austral Archaeology has developed an archaeological testing methodology that follows the requirements of the Code of Practice.

Our test excavation methodology is based on the Code of Practice which states that all “test excavations must be excavated using hand tools only” and “the first excavation [pit] must be excavated in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation [pit], 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented” (2010, p.26). The Code of Practice is also clear on how many test pits should be excavated and their placement.

It is estimated that a sample of at most 21 test pits will be excavated during the testing phase. We have determined that, based upon the size of the areas of moderate potential and the study area’s

overall potential, this would be completed by a team of 2 archaeologists and 2 Aboriginal stakeholders in 4 days..

The following excavation methodology will be employed for the test excavations:

- The hand excavation of 500 x 500 millimetre test pits across a systematic 20 metre grid in areas considered to have high and moderate sensitivity.
- All excavation will be conducted by hand, and the excavation of initial test pits will proceed in 50 millimetres spits. Based on the results of the initial test pits, subsequent test pits will be excavated either in 100 millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each test pit will be conducted during excavation using either printed *pro forma* or with *digital pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, the material may need to be wet sieved. Water for the sieving station would be provided by a water tanker and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance. Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits at the conclusion of the testing program.
- Each test pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the testing program

Artefact Collection and Storage

Collection and salvage of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

- Each artefact identified during the subsurface testing will be relocated and temporarily stored at Austral's head office located at 46 Railway Street, Liverpool NSW. After the submission of the final subsurface testing report, the collected Aboriginal material will be taken to a location within or near to the study area previously agreed upon by Cardno and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders and APS are to be invited to attend/participate in the return of artefacts to country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the OEH's AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and the OEH to be consulted over a suitable relocation site. This new site will also require GPS co-ordinates and all necessary details to be recorded with the OEH AHIMS.

5. ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) that documents the assessment of Aboriginal cultural heritage values, potential harm to these values as part of the project and strategies to manage any impacts will be prepared. The ACHAR will be prepared in accordance with the Consultation Requirements and the Code of Practice.

The ACHAR will include at a minimum the following content:

- Steps completed as part of the Aboriginal consultation process.
- Analysis of the environmental context of the study area.
- Summary of Aboriginal archaeological studies in the region and their results.

- Predictive statements relating to the nature of Aboriginal sites and values within the locality.
- Results of the test excavations.
- Details of Aboriginal sites identified and an assessment of their significance.
- Impact Assessment
- Management Strategies

As part of Stage 4 of the Consultation Requirements, Aboriginal stakeholders will be provided with the draft ACHAR for their review and comment. Any comments and responses to these comments by Austral or the proponent will be documented in the final ACHAR. Austral will respond to all comments received and will outline how these have been considered and/or implemented as part of the final ACHAR (DECCW 2010, p.6).

Please note that the final decision on the employment of individuals to assist with the project rests with the Proponent.

Please take the time to read this letter and the associated report, and please feel free to contact me on any of the numbers provided below should you wish to raise any concerns or if you require additional information.

Please ensure that your reply reaches this office no later than 12-May 2020 and thank you for your help with this matter.

Please do not hesitate to contact me on 0427 607 837 if you wish to discuss any aspect of this submission.

Yours sincerely,



Neil Fenley

Senior Archaeologist

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 038 258

E: neilf@australarch.com.au

6. REFERENCES

Burke, H & Smith, C 2004, *The Archaeologists handbook*, Allen & Unwin, NSW.

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

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

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



Figure 18 - Proposed Test Pits within the Study Area

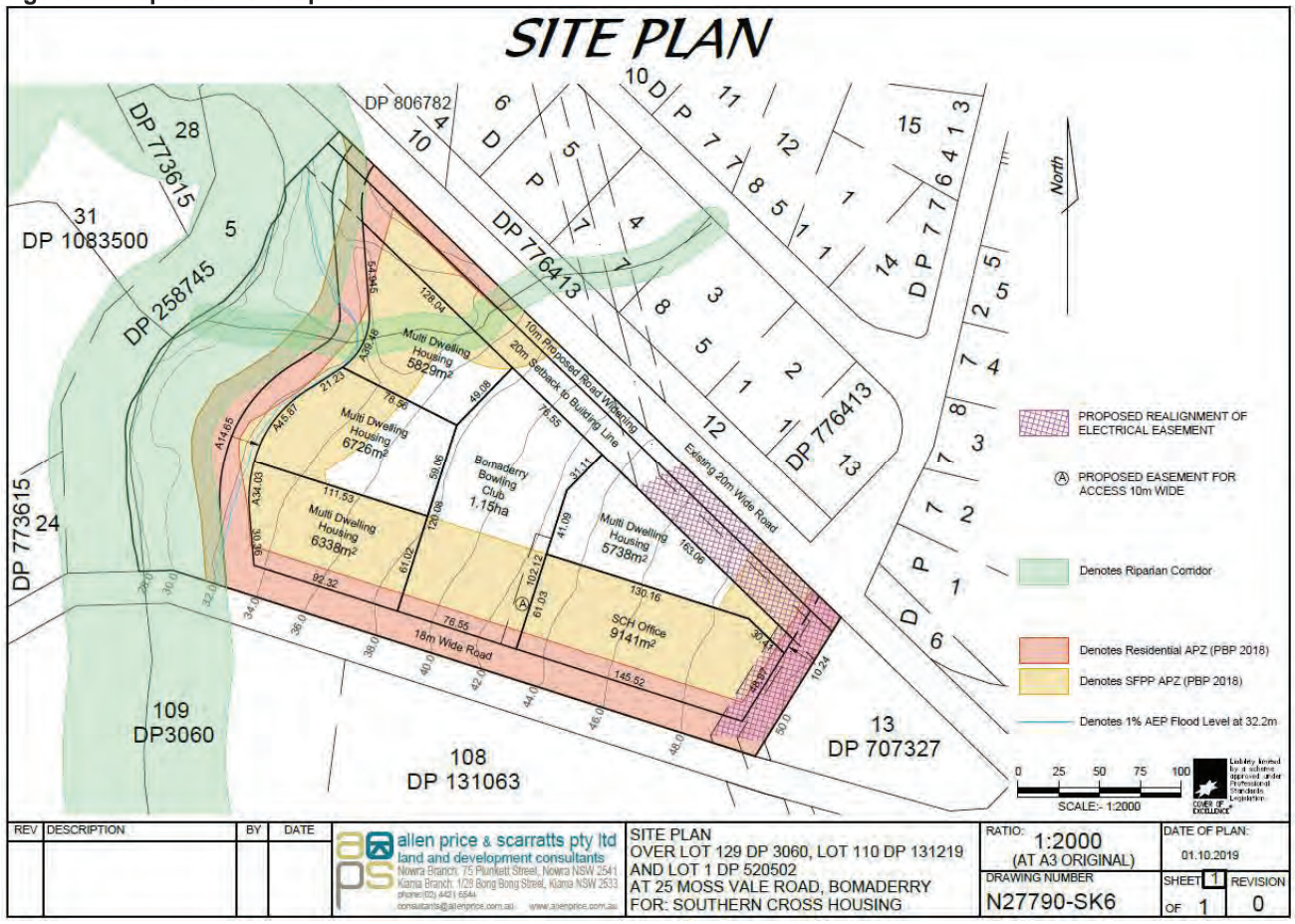
Figure 1. Proposed Test Pit Locations

Aboriginal Technical Report

Source: Nearmap

Drawn by: WA Date: 05/02/2020

Figure 2. Proposed Development



APPENDIX 5: STAGE 4 CONSULTATION LETTERS AND PROJECT UPDATES

5A: STAGE 4 RAP REVIEW OF DRAFT ACHAR

Sejal Jam

From: Hayley Hunter
Sent: Thursday, 13 May 2021 2:56 PM
To: Sejal Jam; heritagemailbox@environment.nsw.gov.au; baduchts@gmail.com; barrabyculturalservices@gmail.com; biamangachts@gmail.com; bilingachts@gmail.com; nuragunyu@gmail.com; darrylcaines8@gmail.com; grc04@live.com.au; garycaines87@gmail.com; cullendullachts@gmail.com; daruglandobservations@gmail.com; dharugchts@gmail.com; clive.freeman@y7mail.com; gordy2540@hotmail.com; bunjilsmith@gmail.com; gundungurratectribsevices@gmail.com; oldmanwisdomgumaraa@gmail.com; gundungurratectribsevices@gmail.com; gundungurratectribsevices@gmail.com; gunyuuchts@gmail.com; richardcampbell123@outlook.com; jerringong@gmail.com; Alfred Wellington; jlalc17@gmail.com; karrialchts@gmail.com; munyungachts@gmail.com; murramarangchts@gmail.com; murrabidgeemullangari@yahoo.com.au; murrabidgeemullangari@yahoo.com.au; murrumbul@gmail.com; nowralalc@bigpond.com; nundagurri@gmail.com; pemulwuyd@gmail.com; owen.fpfs@gmail.com; thoorganura@gmail.com; lbjwright1977@hotmail.com; troytungai72@outlook.com; leannecaroltungai@gmail.com; admin@ulladullalalc.com.au; ulladulla@internode.on.net.au; Walbunja@gmail.com; walgaluchts@gmail.com; walgaluchts@gmail.com; warrabingi@gmail.com; gayle.w@hotmail.com; noelwebster2@bigpond.com; wingikarachts@gmail.com; wullunglb@gmail.com; bd875 @uow.edu.au; yurrandaali_cs@outlook.com; council@shoalhaven.nsw.gov.au; Rose.OSullivan@environment.nsw.gov.au; LLS Enquiry SouthEast Mailbox
Subject: RE: Stage 4 Consultation for 2109 Moss vale road ACHA report

Sensitivity: Confidential

Hi,

The below is incorrect you will have until the 4th of June

Kind Regards,

Hayley Hunter
Operations Manager

M: 0418973444
P:03 5052 6617
E: hayleyh@australarch.com.au
W: https://www.australarchaeology.com.au

Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Sejal Jam <sejalj@australarch.com.au>
Sent: Monday, 10 May 2021 5:29 PM
To: heritagemailbox@environment.nsw.gov.au; baduchts@gmail.com; barrabyculturalservices@gmail.com; biamangachts@gmail.com; bilingachts@gmail.com; nuragunyu@gmail.com; darrylcaines8@gmail.com; grc04@live.com.au; garycaines87@gmail.com; cullendullachts@gmail.com; daruglandobservations@gmail.com; dharugchts@gmail.com; clive.freeman@y7mail.com; gordy2540@hotmail.com; bunjilsmith@gmail.com; gundungurratectribsevices@gmail.com; oldmanwisdomgumaraa@gmail.com; gundungurratectribsevices@gmail.com; gundungurratectribsevices@gmail.com; gunyuuchts@gmail.com; richardcampbell123@outlook.com; jerringong@gmail.com; Alfred Wellington <jlalc@bigpond.com>; jlalc17@gmail.com; karrialchts@gmail.com; munyungachts@gmail.com; murramarangchts@gmail.com; murrabidgeemullangari@yahoo.com.au; murrabidgeemullangari@yahoo.com.au; murrumbul@gmail.com; nowralalc@bigpond.com; nundagurri@gmail.com; pemulwuyd@gmail.com; owen.fpfs@gmail.com; thoorganura@gmail.com; lbjwright1977@hotmail.com; troytungai72@outlook.com; leannecaroltungai@gmail.com; admin@ulladullalalc.com.au; ulladulla@internode.on.net.au; Walbunja@gmail.com; walgaluchts@gmail.com; walgaluchts@gmail.com; warrabingi@gmail.com; gayle.w@hotmail.com; noelwebster2@bigpond.com; wingikarachts@gmail.com; wullunglb@gmail.com; bd875@uow.edu.au; yurrandaali_cs@outlook.com; council@shoalhaven.nsw.gov.au; Rose.OSullivan@environment.nsw.gov.au; LLS Enquiry SouthEast Mailbox <enquiry.southeast@lls.nsw.gov.au>
Cc: Hayley Hunter <hayleyh@australarch.com.au>
Subject: Stage 4 Consutlation for 2109 Moss vale road ACHA report
Sensitivity: Confidential

Hello,

Please see the attached draft Report for Stage 4 Consultation of 2109 Moss vale road, Bomaderry ACHA .

If you have any questions or concerns / comments, please do not hesitate to contact myself on the below given information by 18.05.2021.

Thank you,
Kind Regards,

Sejal

Sejal Pandya

MA. Arch./ PG. Dip(Arch)

M: 0431091445

P:03 5052 6617

E: sejalj@australarch.com.au

W: https://www.australarchaeology.com.au

5B: STAGE 4 RAP RESPONSES TO DRAFT ACHAR

Re: Stage 4 Consultation for 2109 Moss vale road ACHA report

Richard campbell <oldmanwisdomgumaraa@gmail.com>
Thu 13/05/2021 16:27
To: Sejal Jam <sejalj@australarch.com.au>

Hi Sejal, thanks for the update n I have no questions about the project

Kindest regards

Richard Campbell
On Thu, 13 May 2021 at 3:33 pm, Sejal Jam <sejalj@australarch.com.au> wrote:

> Hi Everyone,
>
> My apologies for the mistake, Please provide information by 07.06.2021.
>
> Thankyou Kindly Sejal
>
> ---
>
> **From:** Hayley Hunter <hayleyh@australarch.com.au>
> **Sent:** 13 May 2021 14:56
> **To:** Sejal Jam <sejalj@australarch.com.au>; heritagemailbox@environment.nsw.gov.au <heritagemailbox@environment.nsw.gov.au>; baduchts@gmail.com <baduchts@gmail.com>; barrabyculturalservices@gmail.com <barrabyculturalservices@gmail.com>; biamangachts@gmail.com <biamangachts@gmail.com>; bilingachts@gmail.com <bilingachts@gmail.com>; nuragunyu@gmail.com <nuragunyu@gmail.com>; darrylcaines8@gmail.com <darrylcaines8@gmail.com>; grc04@live.com.au <grc04@live.com.au>; garycaines87@gmail.com <garycaines87@gmail.com>; cullendullachts@gmail.com <cullendullachts@gmail.com>; daruglandobservations@gmail.com <daruglandobservations@gmail.com>; dharugchts@gmail.com <dharugchts@gmail.com>; clive.freeman@y7mail.com <clive.freeman@y7mail.com>; gordy2540@hotmail.com <gordy2540@hotmail.com>; bunjilsmith@gmail.com <bunjilsmith@gmail.com>; gundungurratectribsevices@gmail.com <gundungurratectribsevices@gmail.com>; oldmanwisdomgumaraa@gmail.com <oldmanwisdomgumaraa@gmail.com>; gundungurratectribsevices@gmail.com <gundungurratectribsevices@gmail.com>; gundungurratectribsevices@gmail.com <gundungurratectribsevices@gmail.com>; gunyuuchts@gmail.com <gunyuuchts@gmail.com>; richardcampbell123@outlook.com <richardcampbell123@outlook.com>; jerringong@gmail.com <jerringong@gmail.com>; Alfred Wellington <jlalc@bigpond.com>; jlalc17@gmail.com <jlalc17@gmail.com>; karrialchts@gmail.com <karrialchts@gmail.com>; munyungachts@gmail.com <munyungachts@gmail.com>; murramarangchts@gmail.com <murramarangchts@gmail.com>; murrabidgeemullangari@yahoo.com.au <murrabidgeemullangari@yahoo.com.au>; murrabidgeemullangari@yahoo.com.au <murrabidgeemullangari@yahoo.com.au>; murrumbul@gmail.com <murrumbul@gmail.com>;

nowralalc@bigpond.com <nowralalc@bigpond.com>; nundagurri@gmail.com <nundagurri@gmail.com>; pemulwuyd@gmail.com <pemulwuyd@gmail.com>; owen.fpfs@gmail.com <owen.fpfs@gmail.com>; thoorganura@gmail.com <thoorganura@gmail.com>; lbjwright1977@hotmail.com <lbjwright1977@hotmail.com>; troytungai72@outlook.com <troytungai72@outlook.com>; leannecaroltungai@gmail.com <leannecaroltungai@gmail.com>; admin@ulladullalalc.com.au <admin@ulladullalalc.com.au>; ulladulla@internode.on.net.au <ulladulla@internode.on.net.au>; Walbunja@gmail.com <Walbunja@gmail.com>; walgaluchts@gmail.com <walgaluchts@gmail.com>; walgaluchts@gmail.com <walgaluchts@gmail.com>; warrabingi@gmail.com <warrabingi@gmail.com>; gayle.w@hotmail.com <gayle.w@hotmail.com>; noelwebster2@bigpond.com <noelwebster2@bigpond.com>; wingikarachts@gmail.com <wingikarachts@gmail.com>; wullunglb@gmail.com <wullunglb@gmail.com>; bd875@uow.edu.au <bd875@uow.edu.au>; yurrandaali_cs@outlook.com <yurrandaali_cs@outlook.com>; council@shoalhaven.nsw.gov.au <council@shoalhaven.nsw.gov.au>; Rose.OSullivan@environment.nsw.gov.au <Rose.OSullivan@environment.nsw.gov.au>; LLS Enquiry SouthEast Mailbox <enquiry.southeast@lls.nsw.gov.au>
Subject: RE: Stage 4 Consultation for 2109 Moss vale road ACHA report

Hi,

The below is incorrect you will have until the 4th of June

Kind Regards,

Hayley Hunter

Operations Manager

M: 0418973444

P:03 5052 6617

E: hayleyh@australarch.com.au

W: https://www.australarchaeology.com.au







Please note: This email (including any/all attachments) is intended solely for the use of the named person/s. You must not rely upon, disclose or copy any part of this email (including any/all attachments) if you are not the intended recipient/s. It may contain confidential and/or legally privileged information. If you receive this email in error, please delete it from your system and notify the sender.

From: Sejal Jam <sejalj@australarch.com.au>
Sent: Monday, 10 May 2021 5:29 PM
To: heritagemailbox@environment.nsw.gov.au; baduchts@gmail.com; barrabyculturalservices@gmail.com; biamangachts@gmail.com; bilingachts@gmail.com; nuragunyu@gmail.com; darrylcaines8@gmail.com; grc04@live.com.au; garycaines87@gmail.com; cullendullachts@gmail.com; daruglandobservations@gmail.com; dharugchts@gmail.com; clive.freeman@y7mail.com; gordy2540@hotmail.com; bunjilsmith@gmail.com; gundungurratectribsevices@gmail.com; oldmanwisdomgumaraa@gmail.com; gundungurratectribsevices@gmail.com; gundungurratectribsevices@gmail.com; gunyuuchts@gmail.com; richardcampbell123@outlook.com; jerringong@gmail.com; Alfred Wellington <jlalc@bigpond.com>; jlalc17@gmail.com; karrialchts@gmail.com; munyungachts@gmail.com; murramarangchts@gmail.com; murrabidgeemullangari@yahoo.com.au; murrabidgeemullangari@yahoo.com.au; murrumbul@gmail.com; nowralalc@bigpond.com; nundagurri@gmail.com; pemulwuyd@gmail.com; owen.fpfs@gmail.com; thoorganura@gmail.com; lbjwright1977@hotmail.com; troytungai72@outlook.com; leannecaroltungai@gmail.com; admin@ulladullalalc.com.au; ulladulla@internode.on.net.au; Walbunja@gmail.com; walgaluchts@gmail.com; walgaluchts@gmail.com; warrabingi@gmail.com; gayle.w@hotmail.com; noelwebster2@bigpond.com; wingikarachts@gmail.com; wullunglb@gmail.com; bd875@uow.edu.au; yurrandaali_cs@outlook.com; council@shoalhaven.nsw.gov.au; Rose.OSullivan@environment.nsw.gov.au; LLS Enquiry SouthEast Mailbox <enquiry.southeast@lls.nsw.gov.au>
Cc: Hayley Hunter <hayleyh@australarch.com.au>
Subject: Stage 4 Consutlation for 2109 Moss vale road ACHA report
Sensitivity: Confidential

Hello,

Please see the attached draft Report for Stage 4 Consultation of 2109 Moss vale road, Bomaderry ACHA .

If you have any questions or concerns / comments, please do not hesitate to contact myself on the below given information by 18.05.2021.

Thank you,

> Kind Regards,
>
> Sejal
>
> **Sejal Pandya**
>
> MA. Arch./ PG. Dip(Arch)
>
> M: 0431091445
>
> P:03 5052 6617
>
> E: sejalj@australarch.com.au
>
> W: https://www.australarchaeology.com.au

--
Director
Gumaraa Aboriginal Experience Pty Ltd

M: 0432645912 M: 0487406782
E: oldmanwisdom@gmail.com info@gumaraa.com.au
W: www.gumaraa.com.au

I acknowledge with respect our Elders past, present and those of the future. All traditional custodians, our lore, our culture, and the land, water and air, where I live, work and travel.

5C: PROJECT UPDATE - STAGE 4 RAP REVIEW OF REVISED ACHAR – NOV 2021

APPENDIX 6: ARCHAEOLOGICAL SALVAGE METHODOLOGY

The following section outlines the proposed salvage methodology for the project.

The salvage excavations for 25, Moss Vale Road will follow the Code of Practice, Requirement 16.

STAGE 1 SALVAGE PITS

- The salvage excavations are to be undertaken to establish a clearer understanding of the dimensions, nature and significance of the known sub-surface deposits.
- The stage 1 methodology will require the excavation of 3 metre x 3 metre open area pits at each of test pits 10/24/25/26, 28, 21, 13, 27 and 22 to investigate the extent of the clusters at those locations.
- If, during these excavations and features such as hearths or middens are encountered the excavations will then be undertaken stratigraphically.
- There is a reasonable potential for skeletal remains to be encountered during the excavations, if this occurs works will immediately cease at this location.
- Works at other locations across the study area can proceed as long as there is no interference or impact at that particular location.
- The Code of Practice, Requirement 25, sets out the procedures to be undertaken in the case of skeletal remains being encountered.

RESEARCH QUESTIONS

The following research questions are proposed to frame the salvage strategy:

1. Can the extent of artefact concentrations observed from the initial test excavations be better refined?
2. How does the artefactual density during the salvage program compare to the testing program? Has a greater volume of excavation yielded similar or different results in terms of characterising the site?
3. What is the variation in density of cultural material across this area; can individual knapping floors or functional processes be identified?
4. Does the additional artefactual material contribute/alter the existing analysis of the nature of this site?
5. Are the results of the salvage program consistent with other sites excavated within the locality and region? How can the results be compared and/or contrasted?

EXCAVATION OF SALVAGE PITS

Salvage excavations will be conducted by hand using only hand tools, including shovels, coal shovels and trowels. The following excavation methodology will be applied:

- All excavation will be conducted by hand, and the excavation of the initial salvage pit will proceed in 50 millimetres spits. Based on the results of the initial salvage pit, subsequent salvage pits will be excavated either in 100-millimetre spits or by stratigraphic unit, dependant on which unit is smaller.
- Recording of each salvage pit will be conducted during excavation using either printed *pro forma* or with digital *pro forma* stored on an electronic tablet.
- 100% of excavated potential artefact bearing deposit will be sieved. Austral has allowed for dry sieving as part of the excavation program. Depending on the soils encountered and site conditions, material may need to be wet sieved. Water for the sieving station would be provided by a water truck and pump.
- Artefacts will be collected from the sieves and bagged according to excavation pit provenance.
- Each salvage pit will be backfilled to the best of our ability with the sieved material excavated from the pits after the salvage program.

ARTEFACT COLLECTION AND STORAGE

Collection and salvage of all artefacts will be undertaken according to the following methodology:

- Each artefact identified during the subsurface salvage will be relocated and temporarily stored at Austal's office located at Shop 1/148 Tongarra Rd, Albion Park NSW 2527 NSW. After the submission of the final subsurface salvage report, the collected Aboriginal material will be taken to a location within or near the study area previously agreed upon by Allen Price & Scarratts and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.
- The landowner on whose property this area may be located is to be approached for consent to return the Aboriginal archaeological material to the site. If the site where the artefacts are to be returned is situated upon Crown Land, then the appropriate authority managing the Local Government Area is to be approached and informed.
- A representative of all registered Aboriginal stakeholders are to be invited to attend/participate in the return of artefacts to the country.
- A GPS recording of the location is to be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the Heritage NSW AHIMS.

STAGE 2 EXPANSION TRIGGERS

Where the Stage 1 salvage pits obtain results that meet one of the criteria below, Stage 2 salvage will be triggered. These criteria are:

- Artefact incidences of high density encountered within a context which warrants further investigation or salvage. The high-density threshold will be defined during Stage 1 salvage.
- Any level of artefact incidence within a stratigraphic or pedological context which warrant further investigation.
- *In situ* bone material relating to the Aboriginal occupation.
- The remains of a hearth in a relatively undisturbed condition.
- A lithic flaking floor in a relatively undisturbed condition.
- An arrangement of stones (showing evidence of deliberate placement by a human agency) in a relatively undisturbed condition.
- A dense layer or lens of cultural material.

Where Stage 2 excavations are triggered, either dispersed 1 metre by 1 metre salvage pits would be excavated in these areas to identify higher artefact densities or the existing Stage 1 salvage pit will be extended into an open area excavation based on increments of 1 metre by 1 metre in order to reveal features of archaeological interest.

STAGE 2 SALVAGE EXCAVATION

Once the nature and extent of the deposit have been established by Stage 1, Stage 2 salvage pits would be excavated in the areas identified as having the highest potential to answer the research questions. This will allow for up 21 Stage 1 pits to be expanded to a maximum of nine square metres. The stage 2 excavations will continue till two consecutive spits have been found without the cultural material. As such, the proposed maximum amount of salvage for both stage 1 and stage 2 salvage excavations would be 85m² across test pits 10/24/25/26, 13, 21, 27, and 28.

APPENDIX 7: REBURIAL LOCATION MAP



Appendix 7 Proposed location for the reburial of artefacts

2109 - 25 Moss Vale Road - N27790

Source: NSW LPI Basemap

Drawn by: WA Date: 2021-04-07

AUSTRAL ARCHAEOLOGY

APPENDIX 8: ABORIGINAL ARCHEOLOGICAL TECHNICAL REPORT

25 Moss Vale Road, Bomaderry, NSW Aboriginal Archaeological Technical Report

FINAL REPORT

Southern Cross Community Housing

31 January 2022

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

Tel: (02) 9568 6701

info@australarch.com.au

www.australarchaeology.com.au

Document Information

Project:	25 Moss Vale Road, Bomaderry, New South Wales
Services required:	Aboriginal Archaeological Technical Report
Client:	Southern Cross Community Housing
Prepared by:	Neil Fenley and Nicole Monk
Project number:	2003

Document History and Approval Status

Version No.	Version Type	Issue Date	Written by	Approved by	Date Approved
1	Final V1	22/06/2020	NF & NM	ALA	22/06/2020
2	Final V2	22/10/2020	NF & NM	ALA	22/10/2020
3	Final V3	06/09/2021	SP & DW	DW	06/9/2021
4	Final V4	03/12/2021	NF	AB	03/12/2021

Distribution of Copies

Version No.	Quantity	Issue date	Issued to
1	1	22/06/2020	Southern Cross Community Housing
2	1	22/10/2020	Southern Cross Community Housing
3	1	06/09/2021	Allen Price and Scarratts
4	1	02/12/2021	Allen Price and Scarratts, Aboriginal Stakeholders, Heritage NSW

Copyright and Moral Rights

No part of this document may be reproduced or distributed in any form or by any means without prior permission from a representative of Austral Archaeology Pty Ltd. Austral Archaeology Pty Ltd also reserves the right to use documents and materials produced for this project for future presentations or publications, if required.

In the preparation of this report historical sources and other reference materials are acknowledged in text citations and in a separate section at the end of the report. Reasonable effort has been made to acknowledge and obtain permission from the relevant copyright owners.

EXECUTIVE SUMMARY

Austral Archaeology Pty Ltd (Austral) has been commissioned by Southern Cross Community Housing to undertake an Aboriginal Archaeological Technical Report (AATR) in accordance with the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010a) [the code of practice]. This report details the archaeological survey for Aboriginal heritage sites or objects which may be located on land at 25 Moss Vale Road (Lot 1, DP520502, Lot 110, DP131219 and Lot 129, DP3060), Bomaderry, New South Wales [NSW] the study area) to support a Development Application being made to Shoalhaven City Council under Part 4 of the *Environmental Planning and Assessment Act 1979*.

The study area is situated within the Shoalhaven Local Government Area (LGA), the Parish of Cambewarra, the County of Camden and within the boundaries of the Nowra Local Aboriginal Land Council (NLALC). The study area is located approximately 55 kilometres south-west of Wollongong and approximately 5 kilometres north of Nowra. The study area is abutted to the south and east by forest and vegetation (Lot 13, DP707327, Lot 108, DP131060 and Lot 109, DP3060), to the north by the Moss Vale Road and to the west by Bomaderry Creek

The location of the study area is shown in Figure 1-1, Figure 1-2, Figure 1-3 and Figure 1-4.

This AATR aims to document the results of the Aboriginal archaeological survey, assess the potential for Aboriginal objects to be present within the study area, assess the potential impact that the proposed development may have on Aboriginal cultural material and to make relevant management recommendations.

The proposed works include the development of the study area into 6 lot subdivision Torrens Title Subdivision from Lot 1 DP 520502, Lot 129 DP 3060 and Lot 110 DP 131219. In addition, the proposal creates a riparian reserve adjacent to Bomaderry Creek that is proposed to be dedicated to Shoalhaven City Council.

PREDICTED NATURE OF ARCHAEOLOGY WITHIN THE STUDY AREA

A search of the Aboriginal Heritage Information Management System (AHIMS) database was undertaken on 5 February 2020 (Client Service ID No. 481699). A copy of the full results of this search is available in Appendix A of this report. There were 113 previously recorded sites within a 5 kilometre radius of the study area (Table 2-4) Of these sites, none were listed with coordinates which place them within the study area, however, four sites were in close proximity to the study area including one artefact and midden site, one artefact scatter and one isolated artefact (AHIMS #52-5-0545, AHIMS #52-5-0546, AHIMS #52-5-0547) along with a grinding groove (AHIMS #52-2-1797).

The topographical features of the study area are typical of the Shoalhaven Alluvial Plains soil landscape in the western portion of the study area and the Nowra soil landscape which dominates the eastern portion of the study area. The study area is located within the Shoalhaven River catchment area, which has its source in the rugged terrain of Braidwood and flows for 300 kilometres generally in a north-easterly direction into the Pacific Ocean east of Nowra. The major watercourse in the vicinity of the study area is Bomaderry Creek, which flows south-east into Shoalhaven River. Bomaderry Creek is a 5th order stream, which runs in a roughly east-west alignment, and forms the western boundary of the study area. the creek fed by two 4th order perennial watercourses, Good Dog Creek and Tapitallee Creek which also run in a rough west-east alignment, flowing down from the escarpment to the west (Figure 3-5).

In the Shoalhaven region, common site types include sub-surface and open artefact scatters, scarred trees, grinding grooves, rock shelters and stone arrangements. The majority of sites are located close to higher-order waterways and may be present even when surface artefacts are absent and have been located sub-surface even after disturbance of original soil. The site types most likely to be present in the study area are low density artefact scatters or single artefacts.

© 2022 Austral Archaeology

The background research undertaken for the study area revealed 4 sites in close proximity to the study area. Three of the sites were artefact scatters and one was a grinding groove site found near the Bomaderry Creek reserve. These sites are located towards the western and south-western sides of the study area. No sites were previously registered within the study area itself.

During the survey, two different landforms of archaeological sensitivity were identified – a gentle simple slope and a creek terrace. Gentle slopes occupy the central area and were assessed to be of moderate archaeological potential. The creek terrace on the western boundary of the study area close to the Bomaderry Creek, was assessed as having moderate to the high archaeological potential. The two landforms were considered to be moderately disturbed due to past land-use practices.

Test excavation was conducted in these two landforms. A total of 31 pits were excavated covering the two areas. A total of 114 artefacts were recorded from the gentle slope and creek terrace landform from the test pits.

The Aboriginal sites identified during this ACHA report are described, along with their significance in the table below:

Site	Associated AHIMS listings	Aboriginal cultural heritage values	Significance
Moss Vale Road Artefact Scatter	• Moss vale road artefact scatter 1	Moss Vale Road Artefact Scatter 1 represents an open artefact scatter site. The artefact scatter spans two landforms- gentle slope and creek terrace and contained a total of 114 artefacts with a reasonably even distribution across the study area. Several loci of higher density clusters were recorded towards the base of the gentle slope and outer edge of the creek terrace. Although the site represents a common site type in the region, the potential to contribute to understandings of Aboriginal occupation of the area through analysis of a larger sample of artefacts means that it retains moderate archaeological significance.	Moderate

RECOMMENDATIONS

The following recommendations are derived from the findings described in this ACHA. The recommendations have been developed after considering the archaeological context, environmental information, consultation with the local Aboriginal community, and the findings of the test excavation and the predicted impact of the planning proposal on archaeological resources.

It is recommended that:

1. Before any works occur, the proponent is to apply to Heritage NSW for an Aboriginal Heritage Impact Permit (AHIP) to partially harm site Moss Vale Road Artefact Scatter 1 (AHIMS # 52-5-0996), please note the boundaries of this site have expanded to incorporate the registered sites AHIMS # 52-5-0997 and AHIMS # 52-5-0996. This site is protected under Section 90 of the *NSW National Parks and Wildlife Act 1974* (NPW Act). The proponent must not undertake any development work on the site prior to receiving an AHIP.
2. A condition of the AHIP should be the salvage of a larger sample of artefacts from TPs 10, 13, 21, 22, 27 and 28. This salvage should be undertaken according to the salvage method provided in Appendix 6 of this report.
3. Prior to the commencement of any ground works related to the activity, all contractors and/or employees of contractors involved in ground disturbance works must attend a cultural heritage induction prepared and presented by a qualified archaeologist in cooperation with local Aboriginal people.

© 2022 Austral Archaeology

4. The proponent must prepare an Ad Hoc finds protocol to guide actions subsequent to finding suspected Aboriginal objects or remains. The protocol should be submitted as part of the AHIP application
5. Aboriginal ancestral remains may be found in a variety of landscapes in NSW. If any suspected human remains are discovered during any activity, you must:

- immediately cease all work at that location and not further move or disturb the remains
- notify the NSW Police and Heritage NSW's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location
- not recommence work at that location unless authorised in writing by Heritage NSW.

6. All Aboriginal objects collected during the archaeological testing will be reburied onsite at the nominated location (Appendix E).
7. It is recommended that the Proponent continues to inform the Aboriginal stakeholders about the management of Aboriginal cultural heritage within the study area following the completion of the project. The consultation outlined as part of this ACHA is valid for 6 months and must be maintained by the proponent for it to remain continuous. If a gap of more than 6 months occurs, then the consultation will not be suitable to support an AHIP for the project.
8. A copy of this report should be forwarded to all Aboriginal stakeholder groups who have registered an interest in the project.

© 2022 Austral Archaeology

CONTENTS

EXECUTIVE SUMMARY III

CONTENTS VI

1 INTRODUCTION 1

1.1 PROJECT DESCRIPTION 1

1.2 ASSESSMENT OBJECTIVES 1

1.3 FEDERAL AND STATE LEGISLATION 6

1.4 SECTION SUMMARY 7

1.5 PROJECT TEAM AND QUALIFICATIONS 8

1.6 ACKNOWLEDGEMENTS 8

1.7 ABBREVIATIONS 8

2 ABORIGINAL ARCHAEOLOGICAL CONTEXT 10

2.1 THE SHOALHAVEN ABORIGINAL ARCHAEOLOGICAL CONTEXT 10

2.2 POPULATION AND CONTACT HISTORY 10

2.3 REGIONAL ARCHAEOLOGICAL CONTEXT 11

2.4 LOCAL ARCHAEOLOGICAL CONTEXT 19

2.5 HERITAGE DATABASE SEARCH RESULTS 25

2.5.1 Aboriginal Heritage Information Management System Search Results 25

2.5.2 Other Heritage Register Search Results 26

3 LANDSCAPE CONTEXT 29

3.1 INTRODUCTION 29

3.2 LOCAL GEOLOGY 29

3.3 SOIL LANDSCAPES 29

3.3.1 Shoalhaven 29

3.3.2 Nowra 30

3.4 TOPOGRAPHY AND LANDFORM 30

3.5 HYDROLOGY 35

3.6 CLIMATE 37

3.7 FLORA AND FAUNA 37

3.8 PAST LAND USE PRACTICES 37

3.9 POTENTIAL LAND USE IMPACTS ON THE ARCHAEOLOGICAL RESOURCE 38

4 PREDICTIVE STATEMENT 44

5 ARCHAEOLOGICAL FIELD METHODS 46

5.1 SURVEY METHODOLOGY 46

5.1.1 SURVEY OBJECTIVES 46

5.1.2 SAMPLING STRATEGY 46

5.1.3 SURVEY METHODS 46

© 2022 Austral Archaeology

5.2 TEST EXCAVATION METHODOLOGY 51
5.2.1 TEST EXCAVATION OBJECTIVES 51
5.2.2 TEST EXCAVATION METHODOLOGY 51
5.2.3 RECORDING 51
5.2.4 ANALYSIS OF EXCAVATED MATERIAL 52
5.3 ARTEFACT COLLECTION AND STORAGE 52

6 ARCHAEOLOGICAL RESULTS **55**
6.1 SURVEY RESULTS 55
6.2 TEST EXCAVATION RESULTS 56
6.2.1 GENTLE SLOPE SAMPLE AREA 1 57
6.2.2 CREEK TERRACE SAMPLE AREA 2 58
6.2.3 HILL CREST 58
6.3 LITHICS ANALYSIS 64
6.3.1 RESULTS OF THE ANALYSIS 65
6.4 ABORIGINAL SITE EXTENT 68
6.5 ANALYSIS AND DISCUSSION 73

7 ASSESSMENT OF HERITAGE SIGNIFICANCE **74**
7.1 BASIS FOR THE ASSESSMENT 74
7.2 ASSESSMENT OF SIGNIFICANCE 75
7.2.1 AESTHETIC SIGNIFICANCE VALUES 75
7.2.2 HISTORIC SIGNIFICANCE VALUES 76
7.2.3 SCIENTIFIC SIGNIFICANCE VALUES 76
7.2.4 SOCIAL AND SPIRITUAL SIGNIFICANCE VALUES 77
7.3 STATEMENT OF SIGNIFICANCE 77

8 IMPACT ASSESSMENT AND MANAGEMENT RECOMMENDATIONS **80**
8.1 PROPOSED ACTIVITY 80
8.2 ASSESSING HARM 80
8.2.1 ECOLOGICALLY SUSTAINABLE DEVELOPMENT 80
8.2.2 TYPES OF HARM 81
8.3 IMPACT ASSESSMENT 81
8.4 RECOMMENDATIONS 82

REFERENCES **84**

APPENDICES **87**
APPENDIX A: AHIMS SEARCH DATA 87
A1: AHIMS Search Results – 5 February 2020 88
A2: AHIMS Search Results Updated – 18 November 2021 89
APPENDIX B: PROPOSED WORKS 90
APPENDIX C: TEST EXCAVATION DATA 91

© 2022 Austral Archaeology

APPENDIX D: ARTEFACT DATA CATALOGUE 92
APPENDIX E: PROPOSED REBURIAL LOCATION 93

FIGURES

Figure 1-1 Location of the study area 2
Figure 1-2 Topography of the study area and surrounds 3
Figure 1-3 Aerial Imagery of the study area 4
Figure 1-4 Cadastral boundaries surrounding the study area 5
Figure 2-1 Foraging Model (Foley 1981) 14
Figure 2-2 AHIMS listings within 5km of study area 27
Figure 2-3 AHIMS listings nearby the study area 28
Figure 3-1 Mitchell landscapes surrounding the study area 31
Figure 3-2 Geological landscapes surrounding the study area 32
Figure 3-3 Soil landscapes surrounding the study area 33
Figure 3-4 Landforms evident within the study area 34
Figure 3-5 Hydrology surrounding the study area 36
Figure 3-6 1955 Crown Plan showing location of factory site 39
Figure 3-7 1961 Historic Aerial Imagery 40
Figure 3-8 1979 Historic Aerial Imagery 41
Figure 3-9 1997 Historic Aerial Imagery 42
Figure 3-10 2003 Historic Aerial Imagery 43
Figure 5-1 Landscape view of the hill slope 47
Figure 5-2 Landscape view of the gentle slope landform within the study area 47
Figure 5-3 View of the cattle yards facing east 48
Figure 5-4 View of the cattle yards facing north-east 48
Figure 5-5 View of the creek landform 49
Figure 5-6 View of the dam in the south-west portion of the study area facing north. 49
Figure 5-7 Survey transect map 50
Figure 5-8 Landforms evident within the study area 53
Figure 5-9 Test pit locations 54
Figure 6-1 Test pits location within the study area 59
Figure 6-2 Test pit 21- excavated in gentle slope (landform)-Testing area 1 60
Figure 6-3 Test pit 10 - transitional stratigraphy from gentle slope to Creek terrace 60
Figure 6-4 Test pit-8, stratigraphy in creek terrace(landform) -Testing area 2 61
Figure 6-5 North section of test pit 13 showing reddish-brown sandy clay layer 62
Figure 6-6 North section of Test Pit 7, deposition pattern of the Creek terrace area 63
Figure 6-7 Flake Percussion Length (all materials) 66
Figure 6-8 Flake Elongation 67
Figure 6-9 Landscape view of Moss vale Road Artefact Scatter near the north-eastern corner 68

© 2022 Austral Archaeology

Figure 6-10 Landscape view of Moss vale Road Artefact Scatter -the gentle slope 69
Figure 6-11 Landscape view of Moss vale Road Artefact Scatter- Creek Area 70
Figure 6-12 Selection of artefacts from Moss Vale Road Artefact Scatter 70
Figure 6-13 Selection of artefacts from Moss Vale Road Artefact Scatter 71
Figure 6-14 Site extent of Moss Vale Road Artefact Scatter 72
Figure 7-1 Disturbance evident within the study area 78
Figure 7-2 Archaeological potential evident within the study area 79
Figure 8-1 Location of Aboriginal heritage sites in relation to proposed development 83

TABLES

Table 1-1 Federal Acts 6
Table 1-2 State Acts 6
Table 1-3 State and Local Planning Instruments 7
Table 1-4 Aboriginal Community Consultation Guidelines 7
Table 2-1 Summary of Wollongong LGA Predictive Statement Developed by Mary Dallas (1995) (After AMBS 2006) 15
Table 2-2 Summary of relevant regional reports 19
Table 2-3 Summary of past reports in close proximity to the study area 21
Table 2-4 Analysis of AHIMS site features 25
Table 3-1 Summary of past land uses within the study area, and the potential impacts on archaeological resources 38
Table 6-1 Effective Survey Coverage 56
Table 6-2 Artefact distribution for test pits with artefacts 56
Table 6-3 Summary of soil characters within the three landforms 62
Table 6-4 Terminology used in the identification of stone tools 64
Table 6-5 Artefact frequencies 65
Table 6-6 Summary of AHIMS listings which form Moss Vale Road Artefact Scatter 68
Table 7-1 Definitions of Burra Charter significance values (Australia ICOMOS 2013b) 74
Table 7-2 Gradings used to assess the cultural values of the study area 75
Table 8-1 Definition of types of harm 81

© 2022 Austral Archaeology

1 INTRODUCTION

Austral Archaeology Pty Ltd (Austral) has been commissioned by Southern Cross Community Housing to undertake an Aboriginal Archaeological Technical Report (AATR) in accordance with the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010a) [the Code of Practice]. This report details the archaeological survey for Aboriginal heritage sites or objects which may be located on land at 25 Moss Vale Road (Lot 1, DP520502, Lot 110, DP131219, and Lot 129, DP3060), Bomaderry, New South Wales [NSW] (the study area), in to support a Development Application being made to Shoalhaven City Council under Part 4 of the *Environmental Planning and Assessment Act 1979*.

The study area is situated within the Shoalhaven City Council Local Government Area (LGA), the Parish of Cambewarra, the County of Camden and within the boundaries of the Nowra Local Aboriginal Land Council (NLALC). The study area is located approximately 55 kilometres south of Wollongong and approximately 5 kilometres north of Nowra. The study area is abutted to the south and east by forest and vegetation (Lot 13, DP707327, Lot 108, DP131060 and Lot 109, DP3060), to the north by the Moss Vale Road and an uninhabited property (Lot 5, DP258745) that is demarcated along the centreline of Bomaderry Creek.

The location of the study area is shown in Figure 1-1, Figure 1-2, Figure 1-3 and Figure 1-4.

This AATR aims to document the results of the Aboriginal archaeological survey, assess the potential for Aboriginal objects to be present within the study area, assess the potential impact that the proposed development may have on the Aboriginal cultural material and make relevant management recommendations.

1.1 PROJECT DESCRIPTION

The scope of works is taken from plans and information provided by the proponent. The proposed works include the subdivision and development of the study area into residential buildings, a bowling club with bowling greens and, as well as roads and infrastructure to service these lots.

It is understood that these proposed works will involve:

- The demolition of existing structures and the filling in of dams
- large scale groundworks including extensive earth excavation and levelling.
- The installation of infrastructure, such as houses, and construction of roads.
- The clearance of existing vegetation within areas marked for development.

1.2 ASSESSMENT OBJECTIVES

The scope of this AATR report is based on the legal requirements, guidelines and policies of the Aboriginal Heritage Team of the Energy, Environment and Science Group (EESG) of the Department of Planning, Industry and Environment (DPIE), formerly the Office of Environment and Heritage (OEH) and the Department of Environment, Climate Change and Water (DECCW). The guiding documents for this assessment are the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011) [the Guide to Reporting] and the Code of Practice (DECCW 2010a).

The scope of works includes the following:

- Undertake a literary review of available data, including previous studies/investigations from around the study area.
- Undertake necessary consultation with relevant government agencies and key local Aboriginal stakeholders.
- Document the results of the archaeological survey undertaken in accordance with the Code of Practice.
- Provide management recommendations.

© 2022 Austral Archaeology



Figure 1-1 Location of the Study Area

25 Moss Vale Road, Bomaderry, NSW Aboriginal Survey Report

Source: NSW DFSI Aerial and Basemap *Drawn by: WA* *Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY



Figure 1-2 Topography of the Study Area and Surrounds

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Survey Report

Source: NSW DFSI Basemap *Drawn by: WA* *Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY



Figure 1-3 Aerial Imagery of the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Survey Report

Source: NSW DFSI Basemap; Nearmap *Drawn by: WA* *Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

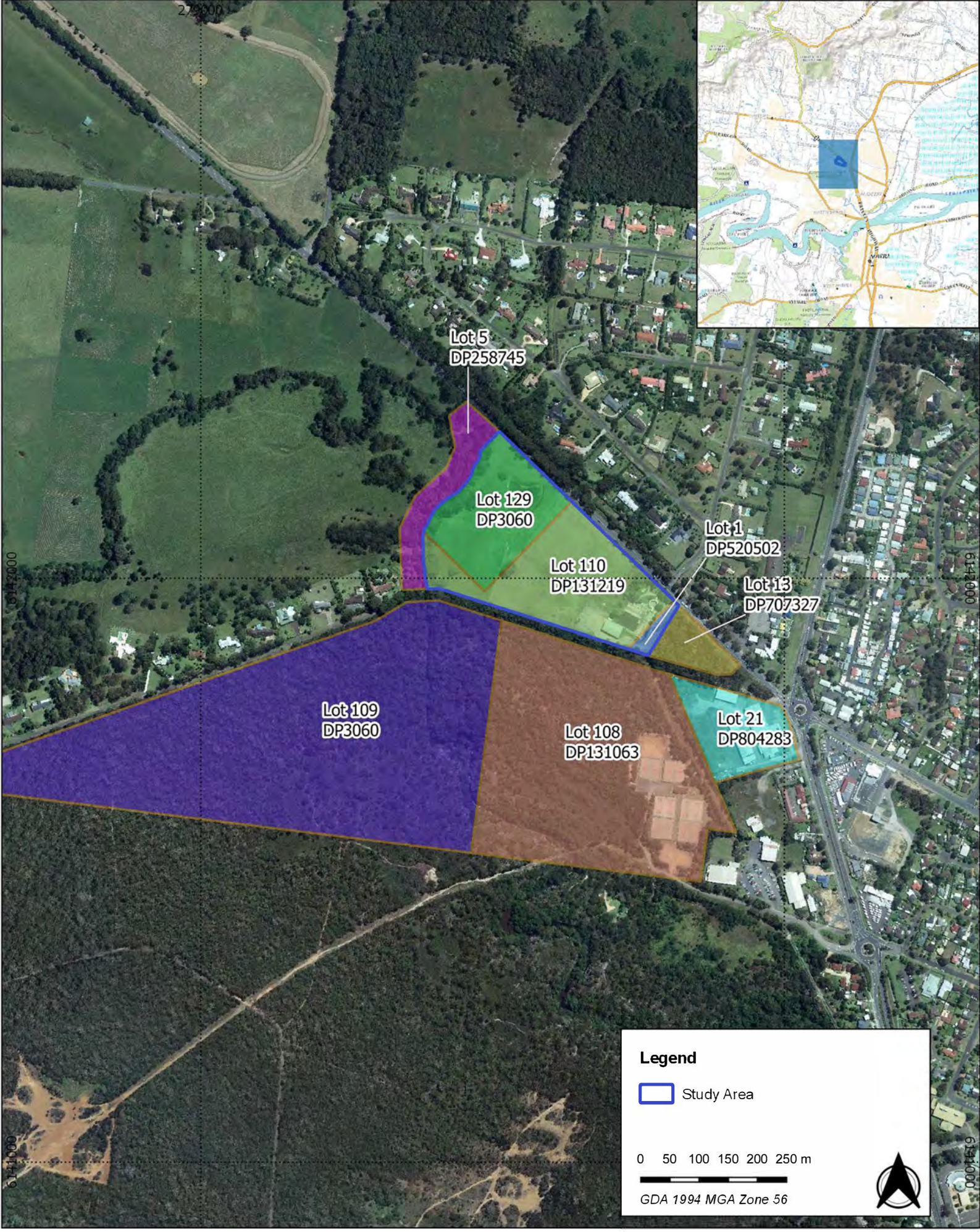


Figure 1-4 Cadastral Information Surrounding the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Survey Report

Source: NSW DFSI Basemap and DCDB Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY

1.3 FEDERAL AND STATE LEGISLATION

Aboriginal archaeological and cultural heritage assessments in NSW are carried out under the auspices of a range of State and Federal acts, regulations and guidelines. The acts and regulations allow for the management and protection of Aboriginal places and objects, and the guidelines set out best practice for community consultation in accordance with the requirements of the acts.

Table 1-1 details the national acts and guidelines which have been identified as being applicable or with the potential to be triggered with regards to the proposed development. Table 1-2 identifies and details NSW legislation potentially applicable to the project. Table 1-3 identifies and details local legislation, including council policies, which may be applicable. Table 1-4 details aboriginal consultation legislation set in place by the Aboriginal heritage team of the EESG.

Table 1-1 Federal Acts

Federal Acts:	Applicability and implications
Environment Protection and Biodiversity Conservation Act 1999	This act has not been triggered and so does not apply. • No sites listed on the National Heritage List (NHL) are present or in close proximity to the study area. • No sites listed on the Commonwealth Heritage List (CHL) are present or in close proximity to the study area.
Aboriginal and Torres Strait Islander Heritage Protection Amendment Act 1987	Applies. • This Act provides blanket protection for Aboriginal heritage in circumstances where such protection is not available at the state level. This Act may also override state and territory provisions.

Table 1-2 State Acts

State Acts:	Applicability and implications
National Parks and Wildlife Act 1974 (NP&W Act)	Applies. • Section 86 – Prohibits both knowingly and unknowingly causing harm or desecration to any Aboriginal object or place without either an AHIP or other suitable defence from the Act. • Section 87 – Allows for activities carried out under an AHIP or following due diligence to be a defence against the harm of an Aboriginal object. • Section 89A – Requires that the NSW OEH must be notified of any Aboriginal objects discovered, within a reasonable time. • Section 90 – Requires an application for an AHIP in the case of destruction of a site through development or relocation.
National Parks and Wildlife Regulation 2019 (NP&W Regulation)	Applies. • Section 57-58 – States minimum standards of due diligence to have been carried out • Section 60 – Requires Aboriginal community consultation process to be undertaken before applying for an AHIP. • Section 61 – Requires production of a cultural heritage assessment report to accompany AHIP applications.

© 2022 Austral Archaeology

State Acts:	Applicability and implications
Environmental Planning and Assessment Act 1979 (EP&A Act)	Applies. • This project is being assessed under Part 5 of the EP&A Act 1979. • Sections 86, 87, 89A and 90 of the NP&W Act 1974 will apply.
NSW Heritage Act 1977	This Act has not been triggered and so does not apply. • No Aboriginal sites listed on the State Heritage Inventory (SHI) are present or in close proximity to the study area.

Table 1-3 State and Local Planning Instruments

Planning Instruments	Applicability and implications
Local Environmental Plans (LEP)	The following LEP is applicable: • *Shoalhaven Local Environmental Plan 2014*
Development Control Plans (DCP)	The following DCP is applicable: • *Shoalhaven City Council Development Control Plan 2014*

Table 1-4 Aboriginal Community Consultation Guidelines

Guidelines	Applicability and implications
OEH Aboriginal cultural heritage consultation requirements for proponents 2010.	The development is to be conducted in accordance with Part 4 of the EP&A Act. • As the project is to be assessed under Part 6 of the NP&W Act, approvals under Section 90 of the NP&W Act 1974 as amended 2010 will be required, S89A of the Act will apply, and the Part 4 Guidelines will apply.

1.4 SECTION SUMMARY

Aboriginal Places and Objects, both known and unknown, are protected in NSW by State and Federal legislation. The present assessment is being conducted under the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW 2010b) [the Consultation Requirements], the Guide to Reporting, under Section 60 of the NP&W Regulations and under Part 6 of the NP&W Act in respect to the identification of Aboriginal stakeholders. As the work is not classified as a State significant project, the procedures under Part 5 of the EP&A Act do not apply.

Searches of the Australian Heritage Places Inventory (AHPI), the Register of the National Estate (RNE), the National Heritage List and the NSW Heritage Council's State Heritage Inventory (SHI) websites identified no recorded sites within the study area.

At the State level, the works are to be assessed under the NP&W Act and the EP&A Act. The relevant sections of the NP&W Act are Section 86, Section 87, Section 89A and Section 90. The *Shoalhaven Local Environmental Plan 2014*, produced in accordance with the EP&A Act, makes provision for the protection of Aboriginal heritage, archaeological sites and potential archaeological sites, but no Aboriginal places or objects within the study area are recorded in the LEP.

© 2022 Austral Archaeology

1.5 PROJECT TEAM AND QUALIFICATIONS

This AATR was prepared by Neil Fenley (Senior Archaeologist, Austral) and Nicole Monk (Graduate Archaeologist, Austral) and project management was provided by Alexander Beben (Director, Austral). William Andrews (Graduate Archaeologist, Austral) conducted all the GIS mapping for the project. The Aboriginal archaeological survey was conducted by Neil Fenley. The report was reviewed by Amanda Atkinson (Director, Austral) for quality assurance purposes.

ALEXANDER BEBEN (B.A. (HONS.) ARCHAEOLOGY, MA. ARCHAEOLOGY)

Alexander Beben is a Director of Austral Archaeology with over 15 years' experience in the completion of historical and Aboriginal heritage projects. Alexander has worked in every state and territory and has completed in excess of 500 consulting projects. Alexander has extensive experience in the completion of surveys, excavations and the authorship of archaeological reports and management plans.

AMANDA ATKINSON (BA. ARCH/PALEO, GRAD DIP ARCH)

Amanda Atkinson is a Director of Austral Archaeology and Aboriginal heritage specialist with over 12 years' experience in Australian archaeology. Amanda has worked predominantly in eastern Australian states and Western Australia. Amanda has extensive experience in Aboriginal consultation and has worked on some of the state's most complex Aboriginal heritage projects.

NEIL FENLEY (B. ARCH. (HONS.)

Neil is a Senior Archaeologist who has 17 years of experience working throughout Australia on a variety of projects. He has led large teams on protracted fieldwork projects in remote areas and specialises in managing large-scale fieldwork projects. Neil has also completed numerous Cultural Heritage Management Reports in Victoria and has recently joined the Austral Archaeology team on a full-time basis.

NICOLE MONK (B. ARCH., GRAD DIP ARCH)

Nicole is a Graduate Archaeologist who has recently joined Austral Archaeology. Nicole has a Bachelor and Graduate Diploma of Archaeology and has experience working in South Australia as well as volunteering throughout Victoria, South Australia and New South Wales.

WILLIAM ANDREWS (B. ENG (SURVEYING)(HONS))

William is a Graduate Archaeologist who has worked with Austral since 2019. William studied Archaeology at the beginning of his educational career before transitioning towards engineering. His honors thesis was completed on digital documentation methods within Archaeology. William also worked as a land surveyor for 2 years before focusing on Archaeology. As such, William specializes in three-dimensional modelling, in-field documentation methods and GIS

1.6 ACKNOWLEDGEMENTS

Austral would like to acknowledge the participation of the following people who contributed to the preparation of the report:

- James Harris Allen Price and Scarratts Pty Ltd

1.7 ABBREVIATIONS

The following are common abbreviations that are used within this report:

AATR	Aboriginal Archaeological Technical Report
ACHA	Aboriginal Cultural Heritage Assessment
AGD	Australian Geodetic Datum
AHD	Australian Heritage Database
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
AHPI	Australian Heritage Places Inventory

© 2022 Austral Archaeology

BP	Before Present
Burra Charter	ICOMOS Australia Burra Charter 1999
Consultation Requirements	*Aboriginal Cultural Heritage Consultation Requirements for Proponents*
Code of Practice	*Code of Practice for the Investigation of Aboriginal Objects in NSW*
DA	Development Application
DCP	Development Control Plan
DECCW	Department of Environment, Climate Change and Water
DPIE	Department of Planning, Industry and Environment
DoP	Department of Planning
EESG	Environment, Energy and Science Group
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&BC Act	*Environmental Protection and Biodiversity Act 1999*
EPI	Environmental Planning Instrument
GDA94	Geocentric Datum of Australia 1994
Guide to Reporting	*Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*
Heritage Act	*NSW Heritage Act 1977*
ICOMOS	International Council on Monuments and Sites
LEP	Local Environmental Plan
LGA	Local Government Area
NHL	National Heritage List
NNTT	National Native Title Tribunal
NP&W Act	*National Parks and Wildlife Act 1974*
NP&W Regulation	*National Parks and Wildlife Regulation 2019*
NLALC	Nowra Local Aboriginal Land Council
NSW	New South Wales
OEH	Office of Environment and Heritage
PAD	Potential Archaeological Deposit
PASA	Potential Archaeologically Sensitive Area
RNE	Register of the National Estate
SHI	State Heritage Inventory

© 2022 Austral Archaeology

2 ABORIGINAL ARCHAEOLOGICAL CONTEXT

2.1 THE SHOALHAVEN ABORIGINAL ARCHAEOLOGICAL CONTEXT

An increase in archaeological studies focused on the Shoalhaven region over the last two decades has cast a new light on previously held views on Aboriginal population size and land use. The limited ethnographic accounts of early settlers were once considered the primary source for archaeological enquiry. However, with the recent spread of urban development within the Nowra environs, archaeological investigations have undergone a corresponding increase.

The major studies which have contributed to our understanding of the Shoalhaven area and those with direct relevance to the study area through their proximity are outlined below. Reference is made to the main trends borne of these investigations providing a broad framework in which to base the current study.

Aboriginal occupation of the Shoalhaven area is currently known to extend back to at least the Pleistocene, with occupation sites such as the Burrill Lake Shelter having been dated to 20,000 years ago and occupation at Bass Point dated back to 18,000 years (Kohen 1997, p.7). Organ & Speechley (1997, p.1) consider it likely that Aboriginal groups have been present in the Shoalhaven region for over 20,000 years.

2.2 POPULATION AND CONTACT HISTORY

Population estimations at the time of contact are notoriously problematic as Aboriginal groups avoided the early settlers and were highly mobile. Another factor which complicates an accurate estimation is the effect of European diseases such as influenza and smallpox, which decimated Aboriginal populations soon after contact.

Tindale identified the Dharawal-speaking Wodi Wodi group as the Aboriginal custodians of the Nowra area (Tindale 1974, p.156). The range of the Dharawal speakers is described as the country from Botany Bay in the north and Campbelltown in the west, south through the Nepean, Wollondilly, Georges River and Cataract River water catchments down to the Shoalhaven River and Jervis Bay. Alternatively, Dharawal land has also been described as spreading from Sydney in the north, the Blue Mountains and Goulburn in the west, and as far south as Bega (Department of Environment and Conservation 2005a, p.6, Organ & Speechley 1997, p.1). Dharawal people are often sub-divided into several smaller categories referred to as fresh water, bitter water or salt water people depending on whether they occupied the coastal regions, the swamps or the plateaus and inland river valleys (Department of Environment and Conservation 2005a, p.6).

Neighbouring Aboriginal groups included the Gundungurra, Darug, Dhurga, Awabakal and Wiradjuri people, and movement in neighbouring territories was permissible under certain circumstances. Favoured north to south travel routes included the current Princes Highway Route, Meryla Pass, and the Kangaroo River Route, while Bulli Pass, the Bong Bong Route and the Cordeaux River were used for travel east to west (Wesson n.d., p.8). A close connection existed between the Nowra Dharawal speakers and the Gameygal Dharawal speakers who traded together, shared ceremonies, and intermarried (Wesson n.d., p.27). During the 1800s, Aboriginal people, including Nowra Dharawal speakers, were known to have moved from the Shoalhaven River down to Jervis Bay, for both food gathering and inter-tribal activities (Lindsay 1994, pp.3–5, Sefton 1981, p.15).

The pre-contact population numbers for the Shoalhaven region are not known and, due to smallpox epidemics preceding European explorers to the region, it is unlikely that early European settlers were able to successfully grasp the traditional population size. The Shoalhaven region was a very densely populated area with between 2 to 4 people present per kilometre^2 (Organ & Speechley 1997, p.1). It has been estimated that in 1825 there were 1,800 Aboriginal people in the Shoalhaven area, spread as far south as Batemans Bay (Organ & Speechley 1997).

© 2022 Austral Archaeology

After land grants were issued to settlers in the Shoalhaven region in the early 1820s, Aboriginal food supplies were destroyed and land use was forever altered through the introduction of European livestock, exotic plants and crops, tree-felling, hunting, the fencing off of lands and the enforcement of European rules about “trespassing” (Organ & Speechley 1997, p.11). All land grants fronted onto freshwater which would have had a hugely detrimental impact on traditional Aboriginal land use (Department of Environment and Conservation 2005a, p.15). From the 1850s onwards, reports indicate that Aboriginal camping and hunting became concentrated along the coast as a result of being pushed to the fringes of their own country by European settlement and farming (Department of Environment and Conservation 2005a, p.25).

There was no record of large-scale armed resistance from the Aboriginal people of the Nowra area against the European settlers, but small-scale resistance including homicide, intimidation and the sabotage of European farms that took place in an attempt to drive off the Europeans. Further thefts occurred in attempts to obtain food once traditional hunting and plant collecting practices had been disrupted by farming (Department of Environment and Conservation 2005a, p.18).

Pressure from the environmental and social impacts of European settlement led to conflict between Aboriginal groups in the Shoalhaven region. Furthermore, as vacant land disappeared, forced interaction between European settlers and Aboriginal people become more frequent, resulting in campsites being established near established European settlements with a variety of responses from the residents. The Osborne family, who settled in Marshall Mount in 1831, showed kindness to the Aboriginal people who camped opposite the old village school and provided supplies of meat and fruit each Christmas (AMBS 2006, p.38, Biosis Pty Ltd 2010, p.45, Department of Environment and Conservation 2005b, Kass 2010, p.13).

More detailed information on the post-contact period is available as the result of the Aboriginal Cultural Resources Study Illawarra Region (Sefton 1981), the historical research of Organ and Speechley (1997) and the IRAHS (Department of Environment and Conservation 2005a).

2.3 REGIONAL ARCHAEOLOGICAL CONTEXT

Many of the earliest archaeological models were either developed for the entirety of the southern NSW coastline, stretching from Sydney south to Batemans Bay or concentrated on the Sydney region (Navin 1987, p.29). These settlement models focussed on seasonal mobility, with the exploitation of inland resources in winter and coastal resources in the remainder of the year (i.e. Poiner 1971, & 1976).

Roger Lawrence proposed a model of subsistence for NSW coastal Aborigines based on archaeological and historical evidence from the Sydney basin and the south coast (Lawrence 1969). He identified three types of sites:

- Small shell middens either by the coast or in harbours, away from permanent water supplies that contain little evidence of other subsistence activities. Sites include Balls Head in Sydney Harbour.
- Sites close to permanent water sources which contain a wide variety of exploitable resources including faunal species, shellfish and fish.
- Sites, mainly middens, which demonstrate a specialisation in the exploitation of coastal food sources, including fish, shellfish and bird remains (terrestrial remains insignificant). These sites contain technology suggesting a specialisation in fishing activities.

Lawrence considered three interpretations of the archaeological evidence. One interpretation proposed that there were three groups of Aboriginal people, one for each type of site. A second interpretation nominated two groups of Aboriginal people, one specialising in coastal resources and another using a combination of coastal and terrestrial resources. A third interpretation suggested that there was one group exploiting the diversity of resources at each site type. Lawrence favoured the last explanation, arguing that the simplest interpretation is often the correct one (Lawrence 1969).

© 2022 Austral Archaeology

The historical evidence from the Sydney basin considered by Lawrence did not support his favoured interpretation of the archaeology. It pointed towards a specialised fishing economy on the coast and a separate group of hunters and gatherers who lived inland (Lawrence 1969). Lawrence pointed out that the first settlers were mainly mariners who were not attuned to observing the hunting and gathering of terrestrial resources. He also cited evidence of Aboriginal fires close to the first settlement that indicated the clearing of land for hunting. Lawrence also highlighted that Aboriginal people were observed with single pronged spears that re different from the multi-pronged fishing spears commonly seen on the east coast of Australia. Taking into account these last three observations, Lawrence still favoured the single group interpretation. However, Lawrence's arguments against the historical information only suggest that the coastal Aboriginal people exploited marine and terrestrial resources. He did not provide evidence that the hinterland people near the Blue Mountains regularly came to the coast to exploit the wealth of the sea. The evidence of Tench, who made several trips to the Hawkesbury River, supported this point. Aboriginal guides from near the harbour accompanied him and they did not recognise Aboriginal people from near the mountains (Lawrence 1969).

An early model developed by Lampert (Lampert 1971, pp.114–130)(1971:114-130) reflected the focus on coastal habitation in the South Coast region. He found that the Aboriginal people were almost completely dependent on seafood for the protein content of their diet and only a few vegetable foods were gathered from the bush. They used well-developed specialised fishing equipment consisting of multi-pronged spears and crescentic fish hooks made of shell. Lampert reported that the Aboriginal people employed a strict division of labour where women always fished with hook and line and men with spears. Lampert also reviewed the archaeology of the south coast and proposed a three-phase technological sequence for south-eastern Australia (Lampert 1971, p.119):

- A pre-Bondian phase from at least 12,000 Before Present (BP) to 6,000 BP, consisting of a mixture of amorphous stone scrapers, a few pebble tools and saw-edged flakes.
- A Bondian phase from 6,000 BP to 1,000 BP containing the same tools from the previous phase with the addition of backed blades and Bondi points.
- A post-Bondian phase where backed blades disappeared, Eloureras and fabricators were introduced, and pre-Bondian technology was retained.

Lampert divided known sites into three groups based on resource exploitation (Lampert 1971, p.128):

- Sites such as Durras, Wollumboola and Wattamolla on the foreshore and beach containing the remains of coastal resources such as fish, shellfish, marine birds and seals, with evidence of specialised technology.
- The Bomaderry Creek site in the Shoalhaven estuary containing only the remains of terrestrial resources despite being near the coast.
- Sites such as Currarong, Burril Lake and Curracurrang, next to creeks or estuaries containing the remains of both coastal and terrestrial resources.

Lampert's review concentrated on coastal sites and indicated that the inhabitants of this area, particularly in the last 6,000 years since the sea level stabilised, operated a diverse economy utilising marine, riverine and terrestrial resources.

Sefton (1981), acting for the Department of Planning, created a large-scale archaeological predictive model for the entire Illawarra and Shoalhaven region. Geographic areas within the model included the catchment areas of Port Hacking, Wingecarribee, Wollondilly and Nattai Rivers, northern Illawarra escarpment, Bass Point, Kangaroo Valley, Nowra and the lower reaches of the Shoalhaven River, Jervis bay, McDonald State Forest, the upper reaches of the Clyde River and Murramurang Aboriginal Area (Sefton 1981, p.2).

This model identified both site types and potentials, and the categories used by Sefton were:

- Archaeological deposits in caves
- Rock shelters and overhangs
- Midden deposits

© 2022 Austral Archaeology

- Open campsites
- Axe grinding grooves
- Water channels
- Canoe, shield or container trees
- Quarries
- Burials
- Paintings
- Rock engravings
- Carved trees
- Ceremonial grounds
- Stone arrangements
- Natural sacred sites (Sefton 1981, pp.21–27)

These site types were compared with landscape potential and the following conclusions were reached:

- The zone from the coast to the upper reach of estuaries has potential for middens, archaeological deposits, surface campsites and burials.
- Flat surfaces and overhangs where Hawkesbury sandstone, Shoalhaven group sandstone and conglomerates outcrop and/or overlay either softer siltstones or shales were identified as having potential for engravings, axe-grinding grooves, water channels, shelters with archaeological deposit, art sites, surface campsites and stone arrangements.
- Alluvial plains and the well-drained hill slopes alongside them had the potential for scarred trees, open sites, shelter sites and shelters with art.
- Areas of stone outcrops or exposures suitable for use in making stone tools may contain quarries and other archaeological sites.
- Prominent natural features of the landscape such as high mountain peaks, rock outcrops and lakes may also be culturally significant as natural sacred sites; such areas may not necessarily have associated archaeological deposit (Sefton 1981, pp.29–31).

Foley (1981) developed a general site distribution model for forager settlement patterns. The general principles described by Foley have been considered useful indicators of sites location across the Australian landscape and has been used as the basis for many current settlement models.

The model splits hunter gatherer sites into two main categories; ‘residential base camps’ and ‘activities areas’ (Foley 1981). People reside in one general location or locations, probably in proximity to a good source of permanent water with shelter from the elements and travelled throughout the local landscape to gather resources at known locations. The right-hand side of Figure 2-1 shows how this settlement pattern would look in terms of artefact discard. The majority of artefacts are deposited in proximity to the residential base camp, fewer at the various resource locations and a generally low, random scatter amount throughout the rest of the landscape, mainly on travelling routes between activity areas and the base camp. The model, however, does not take into account the use of more than one base camp in an area, or changing preferences of camping areas over time; nor does it account for the movement of resources over time.

© 2022 Austral Archaeology

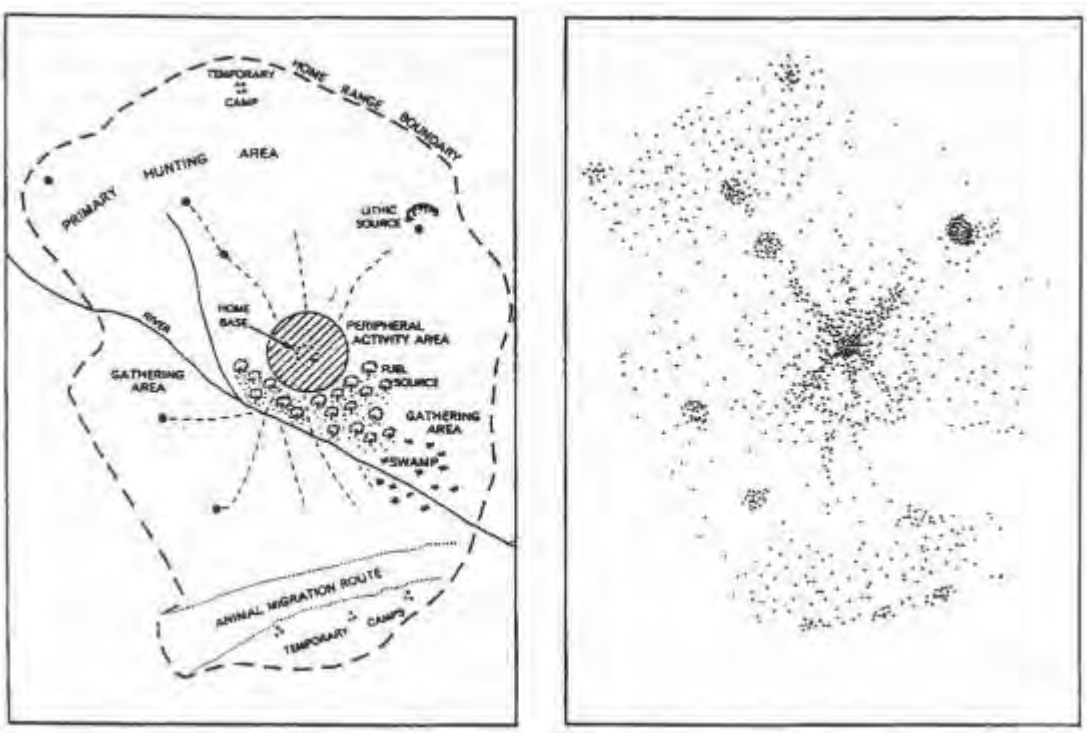


Figure 2-1 Foraging Model (Foley 1981)

Archaeological models of habitation patterns and subsistence of the Illawarra and South Coast region were further developed in the late 1980s and 1990s.

Navin (Navin 1987) further developed Sefton's earlier archaeological model. Her model is useful as it considered the relevant aspects of previous region-wide models while making allowance for the additional resources offered by the proximity of Lake Illawarra (Navin 1987, pp.30–32). In this model, Navin accepted that Lake Illawarra offered a large variety of micro-environmental zones and was capable of supporting sedentary habitation year-round, with coastal resources to the east and floodplains to the west.

Conducting a survey of both Lake Illawarra and the surrounding hinterlands, Navin examined several landforms associated with many of the Aboriginal site types found around the Illawarra region. Navin identified that the lake foreshore and estuary were most likely to contain middens (Navin 1987, pp.47–50), while artefact scatters were more common in the hinterland, along river terraces and on minor creeks (Navin 1987, p.51). Scarred trees were present around the lake but only in substantial stands of native vegetation while grinding grooves were only present where suitable rock outcrops were found, which in this instance was approximately 6 kilometres south of Lake Illawarra (Navin 1987, p.52).

Mary Dallas (1995) undertook an Aboriginal heritage planning study for Wollongong City Council. The study area included the Wollongong LGA portion of the Illawarra coastal plain as well as the Woronora Plateau.

This study found that the most common site types, in order of frequency were shelters with art; axe-grinding grooves; shelters with deposit; open campsites; rock engravings; middens; shelters with midden; abraded grooves; scarred trees; burials; stone arrangements; water holes/wells; quarries; and isolated finds. However, the predictive statement also took into account a wider range of landforms (coast, coastal plain, Escarpment, Woronora Plateau) than are present within the current study area. A full summary of the predictive model developed by Mary Dallas is included below as Table 2-1.

It was also noted by Mary Dallas that sites of Aboriginal occupation from the post-contact period could survive. Examples of post-contact sites may include missions, regular seasonal or "Christmas" camps, and/or places which were consistently occupied over long periods (Dallas 1995, p.39).

© 2022 Austral Archaeology

Contact-era artefacts were most likely to occur in locations of Aboriginal and settler interaction, such as on the edge of pastoral properties, and they may involve the use of introduced materials (i.e. glass, ceramics) by Aboriginal people or be sites of Aboriginal occupation in the historical period.

Table 2-1 Summary of Wollongong LGA Predictive Statement Developed by Mary Dallas (1995) (After AMBS 2006)

Site Type	Location Predictions
Shelter Sites with Engraving, Painting or Drawing	Site distribution is related to the occurrence of suitable rock outcrops and surfaces common to the Hawkesbury Sandstone formation (potential also noted for Narrabeen sandstone formation, but less likely).
Shelter Sites with Occupation Deposit	Likely to occur only in sandstone locations where weathering has resulted in suitable overhangs or recesses in boulder outcrops or cliff lines. As above, these landscapes are common to the Hawkesbury sandstone formation (potential also noted for Narrabeen sandstone formation, but less likely).
Axe Grinding Grooves	May be found where suitable sandstone is exposed in or adjacent to creek lines. Sites are often associated with rock pools in creek beds and on platforms to enable the wet-grinding technique.
Rock Engravings	Often located on high vantage points along ridgelines at the headwaters of creeks but can be located on any suitable fine grained sandstone surface.
Open Camp Sites	Likely to occur on dry, relatively flat landforms along or adjacent to creek lines. Sites containing deposit from repeated or continued occupation are more likely to occur on elevated ground, such as around Lake Illawarra or along its feeder creeks on terraces and benches. Single occurrences might be related to tool loss, abandonment or maintenance. Rarely documented in sandstone country due to difficulty of detection. Likely to be concentrated in the alluvial plains and foothills, and in these areas, are likely to be subsurface.
Quarries	Only found where raw materials (stone or ochre) occur within the landscape and would have been exploited in the past. Loose or surface exposures of stone or cobbles may be coarsely flaked for removal of portable cores. Raw materials can be sourced to these sites and provide evidence for Aboriginal movement and/or exchange. This research on quarry sites has not been conducted in the Wollongong area.
Stone Arrangements	Expected to occur in areas close to stone outcrops, consisting of geometric arrangements of portable stone on prominent rock outcrops. Sites are relatively rare and may be difficult to detect.
Scarred or Carved Trees	Scarred trees are known on the Plateau and Coastal Plain, but distribution patterns are likely to reflect historical clearance of vegetation rather than the actual pattern of scarred trees. Carved tree sites are unknown in the region. A few scarred trees have survived on the Plateau and Coastal Plain. Unless the tree is over 150 years old, scarring is not likely to be of cultural origin.
Burial Sites	Generally located in elevated, dry, soft sediments such as sand and alluvial silts. Usually only visible through disturbance of subsurface sediments or where exposed by erosion. Most commonly identified in coastal dunes and lake foreshore contexts. May also be found within rock shelter formations.
Middens	Usually located on elevated dry ground close to the aquatic environment from which the shellfish has been exploited and where freshwater resources are available. Deeper, more compacted midden sites are often found in areas containing the greatest diversity of resources, such as river estuaries and coastal lagoons. In the Wollongong LGA, midden sites are expected to occur along the immediate coastline, beach dunes and rocky headlands. The Windang Peninsula and the Lake Illawarra foreshores are also known to contain midden sites.
Mythological Sites	Identified by the local Aboriginal community as locations of cultural significance. Do not necessarily contain material evidence of Aboriginal associations with the place.

© 2022 Austral Archaeology

Site Type	Location Predictions
Contact/Historical Sites	Most likely to occur in locations of Aboriginal and settler interaction, such as on the edge of pastoral properties. May involve use of introduced materials (i.e. glass, ceramics) by Aboriginal people, or be sites of Aboriginal occupation in the historical period.

Another useful tool for predictive modelling is based on stream orders. While developed by McDonald during her work on the Cumberland Plain, stream order modelling has been adapted and implemented as a modelling methodology for the entire eastern seaboard of Australia. The basis of stream order modelling is that it can be used to anticipate the potential for Aboriginal campsite locations to be present in the landscape based on the order of water permanence. (McDonald. 1997a, 1997b, 1999, 2000) in particular has drawn on stream order modelling to forecast the potential nature and complexity of sites. These models can also be used to predict site distribution, the possible range of activities carried out at a particular site and the frequency and/or duration of occupation.

Analysing stream order can allow researchers to locate areas of past water permanence, which would have been vital for Aboriginal people. Abundant food and other resources are more likely to occur in areas of water permanence which would, in turn, attract Aboriginal occupation. McDonald's excavations of open artefact scatter sites at the ADI site in St Marys provided evidence of such a correlation (McDonald. 1997b, p.133)

According to McDonald, the range of lithic activities and the complexity of the resulting stone assemblage observed at a location of permanent water differ depending on stream order. Overall, artefact scatters in the vicinity of a higher-order ranking stream reflect a greater range of activities (e.g. tool use, manufacture and maintenance, food processing and quarrying) than those located on lower order streams. Temporary or casual occupations of a site, reflected by an isolated knapping floor or tool discard, are more likely to occur on smaller, more temporary water courses (McDonald. 1997a, pp.134–135).

It is therefore possible, McDonald concluded, that stream order modelling could be utilised to make more specific predictions about the location and nature of Aboriginal sites on the Cumberland Plain while also providing general guidelines which could be transposed throughout NSW. Water permanence (i.e. stream order), landscape unit (i.e. hilltop, creek flat) as well as the proximity to artefact raw materials could result in variations in the density and complexity of an Aboriginal archaeological feature (McDonald. 1997a, p.19, 2000, p.19) Site location and duration of occupation predictions therefore relate to stream order in the following ways:

- In the headwaters of upper tributaries (i.e. 1st order creeks) archaeological evidence will be sparse and represent little more than a background scatter.
- In the middle reaches of minor tributaries (2nd order creeks) archaeological evidence will be sparse but indicate focussed activity (e.g. one-off camp locations, single episode knapping floors).
- In the lower reaches of tributary creeks (3rd order creeks) will be archaeological evidence for more frequent occupation. This will include repeated occupation by small groups, knapping floors (perhaps used and re-used), and evidence of more concentrated activities.
- On major creek lines and rivers (4th order), archaeological evidence will indicate more permanent or repeated occupation. Sites will be complex, with a range of lithic activities represented, and may even be stratified.
- Creek junctions may provide foci for site activity; the size of the confluence (in terms of stream ranking nodes) could be expected to influence the size of the site.
- Ridge top locations between drainage lines will usually contain limited archaeological evidence although isolated knapping floors or other forms of one-off occupation may be in evidence in such a location (McDonald. 2000, p.19).

© 2022 Austral Archaeology

Several recent development-driven excavations and council-driven heritage studies have been undertaken in the Illawarra and Shoalhaven regions, leading to an improvement in our knowledge of settlement patterns of the area. These include Navin Officer (2000), Boot (2002) and Clarke and Kuskie (2006).

In 2000, Navin Officer prepared a predictive model for a site located within the boundaries of Shellharbour City Council, which can be adapted for use in the current study area. As a result of the heritage study, Navin Officer identified the following predictive model rules (Navin Officer 2000, pp.51–52):

- Sites can occur in all types of landscape as long as the necessary requirements are present of well-drained, relatively level ground without rock outcrops, views of surrounding areas and proximity to fresh water sources.
- Sites increase in frequency along the boundaries of differing eco-zones.
- Stone artefacts, either isolated or recorded as a scatter, are the most common site type.
- Ridgelines and spurs offer movement pathways through the landscape and generally contain larger and more significant sites.

Working in a large urban release at the foothills of the Illawarra Escarpment, AMBS (2006) identified 24 archaeological sites, including 13 open camp sites, six isolated finds and five scarred tree locations (with eight scarred trees in total). Sites were positioned on all landforms – six on creek lines, three on alluvial flats, three spanning creeks and alluvial flats, eight on hill slopes and four on spur crests. A total of 198 artefacts were recorded.

The subsequent subsurface testing program showed that all inland landforms contained potentially artefact-bearing deposits. The shallowest potentially artefact-bearing sediments (30 to 500 millimetres) were noted on ridges and hill slopes; the deepest (1 metre) were noted on Holocene terraces. Foot slopes contained deposits of intermediate depth (150 to 550 millimetres).

Based on the results of the landform survey and subsurface testing program, AMBS provided a synthesis of Aboriginal heritage values for the area around West Dapto. Areas of high archaeological potential included all major creek lines, adjacent alluvial flats and foot slopes, plus the pre-contact wetland areas of Mullet, Duck and Marshall Mount creeks. In summary, the conclusions drawn by AMBS were that:

- Sites may be located on all landforms, although at varying levels of site density, artefact density and archaeological and cultural significance.
- Sites may be found in contexts that cross landform boundaries, most commonly extending away from the banks of creeks, across terraces and in some cases onto adjoining foot slopes.
- The majority of artefacts occurred as subsurface deposits, with 480 artefacts from 52 site locations, as opposed to 189 artefacts from 20 surface site locations.
- Highest archaeological potential is accorded to landforms that provided opportunities for camping sites, or those that function as travel routes and that are associated with a range of resources. These include lower tributaries of major creeks, spur crests extending from the Escarpment, and benched foot slopes in the Escarpment foothills. These areas are likely to have a higher frequency of sites, and sites are likely to have higher artefact numbers/densities.
- Other landforms were also likely to contain archaeological sites, but the frequency of sites (and artefact numbers/densities) are likely to be lower.
- Stands of mature vegetation on hill slopes may contain scarred trees. Scarred trees may be considered to be of higher archaeological significance due to their rarity at both regional and local levels.
- Large open camp sites are also considered to be of higher archaeological potential due to the rarity of large open camp sites on landforms of the Illawarra coastal plain.

© 2022 Austral Archaeology

- The conservation value of small, low density artefact scatters is recognised, as their numbers have been reduced due to extensive development of the Illawarra coastal plain.
- Small, low density artefact scatters (being less than 5 artefacts per metre^2) dominate the archaeological resource (summarised from AMBS 2006, pp.VII–VIII)).

Boot (2002) formulated a model for occupation patterns in the South Coast hinterland. He argued that small groups of people travelling in the hinterland were likely to have exploited resources from the immediate surrounds of a site and rarely exported these resources elsewhere, while larger groups would have congregated where abundant short-term resources occurred and would have engaged in export and trade of local resources. Therefore, greater intensity of occupation would have occurred in regions of greater biodiversity (Navin Officer Heritage Consultants 2010, Boot 2002, pp.317–319). As noted above, the study area, at Nowra Bridge, is at the intersection of two geomorphological and botanical regions. It would have constituted an area of particularly high biodiversity within a region that was already relatively abundant. According to Boot (2002) people living in this location would have been more likely to engage in exchange for the export of local resources.

In 2006, Clarke and Kuskie developed a predictive model of the Shoalhaven region in general. They suggested that the region could be divided into two main resource zones, each supporting a different range of occupation types (Clarke & Kuskie 2006, p.ii). These zones were called Primary and Secondary zones, and were defined by terrain units (landforms) as follows:

- Primary resource zones occur in close proximity to the Shoalhaven and Crookhaven rivers and have a higher probability of containing evidence for a wide range of occupation types including congregations of large groups of people, community base camps, nuclear/extended family base camps, camping by small groups hunting and/or gathering (without camping) and transitory movement. Occupation is likely to have been regular and potentially longer in duration in the primary zones.
- Secondary resource zones are located in close proximity to higher order creeks and/or wetlands, including Bomaderry, Mundamia, Calymea, Flat Rock, Bengalee and Sandy Creeks and their associated flats, slopes and terraces. Occupation is likely to have been sporadic and relatively short in duration.

The current study area passes through areas that correspond to both primary and secondary resource zones. It contains areas adjacent to the Shoalhaven River and also contains areas adjacent to the Bomaderry Creek.

Areas outside the primary and secondary resource zones include landforms some distance from higher order creeks and/or wetlands, such as lower order drainage depressions and associated slopes and crests. Occupation in these areas is likely to have involved hunting and/or gathering (without camping) and transitory movement and is likely to have been sporadic and very short in duration (Clarke & Kuskie 2006, p.ii).

Clarke and Kuskie (2006) also found that artefact scatters are likely to be the most common site type in the area, with potential for stone artefact evidence to occur across virtually the entire region. Typically, artefacts would occur in low densities consistent with background discard, though occasional areas of high density would occur, characteristically at camp sites within a primary resource zone.

Rockshelters and axe grinding grooves occur with relative frequency in their search area. Rockshelters were more likely to be located in moderate to steep drainage depressions or spur crest units, although they can also occur in gently sloping terrain where suitable stone outcrops occur. It is possible that larger shelters situated close to a wide variety of resources may have been used as base camps, with smaller shelters utilised when needed. Art sites may occur in any area with a suitable surface. Likewise, grinding grooves may occur in any area with suitable stone outcrops (such as sandstone), generally immediately next to a water source (Clarke & Kuskie 2006).

Although other consultants have undertaken more recent work around the Shoalhaven area, these reports either contain predictive models which are similar in nature to those listed above or are too recent to be obtained from the AHIMS database.

© 2022 Austral Archaeology

2.4 LOCAL ARCHAEOLOGICAL CONTEXT

Although European observers recorded various aspects of the lifestyles of Aboriginal people in the Shoalhaven from the early years of European settlement of the area in the late 18th century, it was not until the 20th century that archaeological investigations of Aboriginal archaeological sites were undertaken.

Since then, archaeological sites have been frequently recorded across the region, and hundreds have been excavated. Most commonly, these contain open scatters of archaeological material such as stone artefacts, engraved or pigmented images or midden material.

Much of the archaeological work in the local area has been undertaken as a result of development-driven archaeological studies or surveys. Table 2-2 below outlines the details and results of some relevant archaeological consultant's reports from the region. Please note that this is not a complete list.

Table 2-2 Summary of relevant regional reports

Reference	Study area location/ description	Results	Site distribution/ Conclusions
Artefact Heritage Pty Ltd 2018	• ACHA for the proposed construction of a new bridge on the Princes Highway over the Shoalhaven River at Nowra. A test excavation program was conducted as part of the assessment. • Situated 3km south of the study area. • Entire study area was divided into 6 survey units. • Landforms identified included flat, slope, hilltop, cliff top, cliff face, embankment.	5 sites identified, including Nowra Bridge 6 (# 52-5-0872), Nowra Bridge 7 (# 52-5-0875), Nowra Bridge 8 (# 52-5-0876), Nowra Bridge 9 (# 52-5-0874) and Nowra Bridge 10 (# 52-5-0873). An archaeological survey was also conducted during the project due to changes in the development. One new Aboriginal site was identified (Nowra Bridge 11 (#52-5-0878).	• 5 PADs were identified, and test excavated. 2 PADs were identified on flat and hilltop landforms respectively, 1 PAD within the slope landform and 2 PADs within the cliff face and cliff top landforms. • The test excavations identified 4 low density artefact scatters and one habitation site. • Nowra Bridge PAD 1 (AHIMS 52-5-0859) had human teeth from one of the test pits.
Navin Officer Heritage Consultants 2012	• Archaeological survey and test excavation within the anticipated construction 'footprint' of the 11.6 kilometres upgrade to the Princes Highway between Toolijooa Road north of Foxground and Schofields Lane south of Berry in New South Wales (NSW). • Situated 12km northeast of the study area.	• The survey identified 29 Aboriginal heritage items within the project area, including two lithic artefacts, 23 potentially archaeological sensitive areas (PADS) and four historical recordings of places of Aboriginal cultural significance. • 21 PADs were selected for testing. • Test excavation	• 236 artefacts were obtained from 298 test pits excavated in 21 PADs. • 7 stone materials were identified. • Assemblage was dominated by flakes (58%) and flaked pieces (19.1%). • Artefacts mostly found in locally elevated micro-topographies within a 200-metre margin around former wetland basins, such as low

Reference	Study area location/ description	Results	Site distribution/ Conclusions
		resulted in 18 out of the 21 PADS yielding 236 stone artefacts.	gradient basal slopes and the crests of low spurs. • Lower lying alluvial flats in valley floors have low archaeological sensitivity.
Navin Officer Heritage Consultants 2010	• An assessment of the environmental impacts on the cultural and archaeological heritage of the projected upgrade to the Princes Highway between Mount Pleasant and Toolijooa Road in NSW. • 21km northeast of the study area.	• 12 Aboriginal Sites within or near the survey area with sub-surface and surface artefacts as well as PADS. • Low to very low artefact densities. In addition, five mature fig trees were deemed to hold Aboriginal cultural significance. • The test excavation sites were located on elevated topographies adjacent to major creek lines, as well as in or near riparian corridors and major ridge crest.	• 12 Aboriginal sites were found in or within the study area with low to very low artefact densities.
Kelleher Nightingale Consulting Pty Ltd 2010	• Archaeological assessment completed for the proposed North Nowra Link Road. • 4.3km south of the study area.	• 28 Aboriginal sites, which included four artefact scatters, two isolated finds, one midden site, one grinding groove site and 20 rock shelter sites along the Bomaderry Creek Regional Park.	• It was concluded that the study area had a high density of Aboriginal material and that the surrounding area was occupied to a high degree by previous Aboriginal populations. • Most sites were in disturbed context and assessed to have low archaeological significance.
Kuskie 2008	• Aboriginal Heritage Impact Assessment for a proposed Ethanol Plant Upgrade at Shoalhaven Starches, NSW. • 3.4km southeast of the	• The assessment found that there was low potential for Aboriginal heritage objects in due to the type of landform, i.e., low	No Aboriginal heritage evidence or cultural values were identified within the study or during the investigation.

© 2022 Austral Archaeology

Reference	Study area location/ description	Results	Site distribution/ Conclusions
	study area.	lying coastal plains.	
Navin Officer Heritage Consultants 2006	• Test excavation program for the Gerroa Sand Mine extension. • The testing included using a mechanically driven auger and included 51 test pits. • 23 km east of the study area.	• A total of 39 artefacts were recovered from five of the test pits, and shell midden was recovered from 26 of the test pits. • The recovered assemblage was dominated by complete and broken flakes, with other artefact types being rare. • Raw material comprised mostly silcrete, quartz and chert, with sandstone, chalcedony and volcanic materials also present. • Coastal Plains and sand dune landforms.	• The artefacts were widely distributed across the site • It was concluded that the site represented low-density background scatters.
Silcox 1990	• Archaeological assessment of Aboriginal and Historic sites within the anticipated Pacific Highway upgrade between Dunmore and North Kiama NSW. • 44km northeast of the study area.	• Four Aboriginal sites featuring artefacts associated with shell middens were found and two potential camp sites. • These results, highlight that midden in estuarine environments are usually located on elevated topographies around estuary margins or on the raised surfaces of older sediment deposition above their inundation zones.	• Four Aboriginal sites were identified during the assessment.

Table 2-3 Summary of past reports in close proximity to the study area

Reference	Study area location/ description	Results	Site distribution/ Conclusions
Austral Archaeology Pty Ltd 2019	Aboriginal Cultural Heritage Assessment, including test excavation, at, Lot 116, DP	• ACHA identified two artefacts from a total of 35 test pits	• It was concluded that the study area has a low density,

© 2022 Austral Archaeology

Reference	Study area location/ description	Results	Site distribution/ Conclusions
	3060 (adjacent to the study area). 2km west of the study area.	excavated within the study area. • The two artefacts were recovered from hillcrest landform at a depth of 50mm.	background scatter of low archaeological significance Disturbances were recorded within upper soil profiles within the A1 topsoil as a result of land clearance, cattle grazing and ploughing activities.
Biosis Pty Ltd 2019	• Aboriginal Cultural Heritage Assessment (ACHA) of a residential subdivision at Taylor's Lane (Lot 1 DP949932), Bomaderry. • 1.3km northwest of the study area.	• A survey followed by test excavation did not identify any Aboriginal heritage material within the Moss Vale AFT1 site area.	• The site was recorded on a hillslope landform within 1st order non-perennial drainage line. • The study area has low subsurface archaeological potential. • It concluded that the study area was occupied by the traditional communities for short duration-hunting gathering and transitional movement activities.
Dibden 2018	• Due Diligence Assessment of Moss Vale Road North Urban Release Area Master Plan and Development Control Plan for future residential development. • 600m northwest of the study area.	• Surveyed 16 units or areas assessing for archaeological potential. • Five sites were identified as having moderate archaeological sensitivity, with other sites having low or negligible sensitivity.	• Moderate disturbances were attributed to Ploughing, grazing, building and rod construction, electricity transmission clearing, fencing. • Gentle slope unit was assessed to have negligible to very low archaeological potential. • Creek landform was assessed to have low moderate archaeological potential. • Drainage depression landform adjacent to the Abernethy's

Reference	Study area location/ description	Results	Site distribution/ Conclusions
			Creek was assessed to have negligible archaeological potential. • One previously known archaeological site was identified during the survey.
Biosis Pty Ltd 2018	• Aboriginal Heritage Due Diligence Assessment for Taylors Lane, Lot 116, DP 3060 (adjacent to the study area) for the proposed residential subdivision at 371 Illaroo Road, Bangalee.	Survey identified two areas of moderate archaeological potential, one on a hill crest in the northern section of the study area, and the other on a terrace landform in the south-eastern section of the study area.	No further results
Biosis Pty Ltd 2017	• An assessment for a proposed residential subdivision in Meroo Meadow, approximately 3 kilometres south of the study area.	• Two low density artefact scatters were identified in the test excavation program. • The assessment undertook test excavations of a PAD located on hill crests and slopes located on Albernathy's Creek.	Results were indicative of short term, sporadic Aboriginal utilisation of the area which is consistent with Clarke and Kuskie's (2006) secondary resource zone occupation and predictive models that favour elevated terrain units in close proximity to higher order creeklines.
Navin Officer Heritage Consultants 2013	Completed a series of assessments for the Princes Highway Upgrade between Gerringong and Bomaderry between 2007 and 2013.	• Field survey recorded 18 Aboriginal sites within the study area, including two artefact scatters and 16 Potential Archaeologically Sensitive Areas (PASAs). • Also, a number of Aboriginal cultural heritage values were identified, including two large old growth fig trees, and potential burial sites. • Fourteen of the sixteen PASAs contained Aboriginal artefacts, with a total of 243 artefacts from the excavation program. The	• All of these sites were identified as having low significance within a local context based on the results of the test excavations. • The sites were located near the riparian corridors and some sites were recorded from a major ridge crest landform of Toolijooa Ridge.

© 2022 Austral Archaeology

Reference	Study area location/ description	Results	Site distribution/ Conclusions
		majority of artefacts were complete and broken flakes, with small numbers of cores also present.	
Kayandel Archaeological Services 2011	• Aboriginal heritage assessment for the Shoalhaven Starches Gas Pipeline Scheme to the north of the study area. • 3km south of the study area.	• Relocation of site Wollingurry Creek 1 containing 13 artefacts. • Previously recorded sites Wollinggurry Creek 2 and 3 were not able to be relocated.	• No new Aboriginal heritage sites were recorded. • Land use patterns were concluded to be of high impact on the Aboriginal heritage. • Low lying flood plains were considered as having no potential for Aboriginal occupation.
Lampert & Steele 1993	• Lampert and Steele undertook two independent research excavations at Bomaderry Creek rockshelter.	• Tests squares determined that deposits were shallow. • Prehistoric occupation evidence was found such as flaked stone and fire blackened macropod bones. • Chert and reef quartz were also found around the site.	• Aboriginal hunter-gatherers briefly lived in the Bomaderry creek area at approximately 1900 years BP and 1400BP. • The people occupying the rock shelters were largely dependent on the immediate surrounding resources available from the tidal estuary of the Shoalhaven River than the ocean resources.
Navin Officer Heritage Consultants Pty Ltd 1992	• Archaeological survey on the northern side of the Shoalhaven River, near Big Island. • 3kms southeast of the study area.	• Two isolated finds were identified, including a ground edge hatchet (APPM Isolated Find 1 #52-5-288 and #52-5-289) and a broken alluvial pebble (APPM Isolated Find 2 #52-5-290).	• The two artefacts were found in a wall of an artificial drainage channel, and it was concluded that they were not *in-situ*.
Navin 1991	• Navin was commissioned by Mitchell McCotter and Associates Pty Ltd to conduct an archaeological and environmental survey to evaluate a potential	• Completing desktop research, Navin identified archaeological sites that range from rock shelters and art to burials close to	• Two sites were identified close to Bomaderry Creek. • Rockshelters were located on the southern bank of

Reference	Study area location/ description	Results	Site distribution/ Conclusions
	second option for a road alignment and bridge development. • Situated between 1km to 400m south of the study area,	Nowra, however; found that no sites were identified at the proposed site. • Navin conducted a survey by walking the length of the proposed development and located two rockshelter sites; a shelter with three artefacts close to Bomaderry Creek and a shelter with four artefacts. • No Aboriginal consultation was used during this survey. • It was concluded that there were no archaeological constraints to the development.	Bomaderry Creek.

2.5 HERITAGE DATABASE SEARCH RESULTS

2.5.1 ABORIGINAL HERITAGE INFORMATION MANAGEMENT SYSTEM SEARCH RESULTS

An extensive search of the AHIMS database was conducted on 5 February 2020 (Client service ID: 481699). A copy of the full results of this search is available in Appendix A of this report. The search identified 113 Aboriginal archaeological sites within a 5-kilometre search area, centred on the study area (Table 2-4). None of these registered sites was found to be located within the study area (Figure 2-2). Of these sites, however, four were located within close proximity to the study area, including one artefact and midden site, one artefact scatter and one isolated artefact (AHIMS #52-5-0545, AHIMS #52-5-0546, AHIMS #52-5-0547) along with a grinding groove (AHIMS #52-2-1797).

To ensure the AHIMS information contained within this report remains valid during the DA application process, an updated AHIMS search was completed on 18 November 2021 for the following area covering the study area: Datum: GDA, Zone: 56, Eastings: 275528.0 - 282951.0, Northings: 6138576.0 - 6145416.0 with a Buffer of 0 meters (Client Service ID: 639691). A copy of the updated search is provided in Appendix A along with the original search results. The updated AHIMS search data was inspected, and it was confirmed that since the original search was conducted no new Aboriginal heritage sites exist within or directly adjacent to the study area (other than the site/s uploaded as a result of the assessment completed for this project).

Table 2-4 Analysis of AHIMS site features

Site type	Occurrence	Frequency (%)
Artefact	53	46.90
PAD	18	15.93
Artefact & PAD	12	10.62
Artefact & Open Camp Site	6	5.31
Art (Pigment or Engraved)	3	2.65

© 2022 Austral Archaeology

Site type	Occurrence	Frequency (%)
Artefact & Shelter with Deposit	5	4.24
Habitation Structure	3	2.65
Modified Tree (Carved or Scarred)	2	1.77
Art (Pigment or Engraved): Artefact Shelter with Art, Shelter with Deposit	2	1.77
Art (Pigment or Engraved): Artefact: PAD	2	1.77
Grinding Groove: Axe Grinding Groove	2	1.77
Art (Pigment or Engraved): Shelter with Art	1	0.88
Artefact Grinding Groove: Shelter with Deposit	1	0.88
Grinding Groove: Habitation Structure	1	0.88
Artefact: Habitation Structure	1	0.88
Artefact: Habitation Structure-Grinding Groove	1	0.88
Total	**113**	**100**

Table 2-4 shows the 16 different site types represented by the search results. Of the 113 previously AHIMS registered sites within a 5-kilometre radius of the study area, the most commonly recorded are artefacts – either isolated or scatters. This site type represents 46.90% (n=53) of the recorded sites. Due to the location of waterways, such as the Bombaderry Creek 5th Order Stream, a pattern has emerged of sites occurring near the locality of the freshwater creek.

Four AHIMS sites were located close to the site, which included one artefact and midden site, one artefact scatter and one isolated artefact (AHIMS #52-5-0545, AHIMS #52-5-0546, AHIMS #52-5-0547) along with a grinding groove (AHIMS #52-2-1797). The first artefact site, AHIMS #52-5-0545, was identified as a red fine grained flake piece, shell fragments and a red, fine grained medial flake with a pot lid scar on the dorsal surface. The second artefact site, AHIMS #52-5-0546, contained upwards of 20 artefacts, with some of the artefacts made from red fine-grained material, grey silcrete, and a pale white fine-grained material. The third artefact, AHIMS #52-5-0547, was an isolated find of one red, fine grained siliceous core with a minimum of two flake scars and was located on the foot track, close to the study area. The fourth AHIMS site, a grinding groove (AHIMS #52-2-1797) has been partially destroyed.

2.5.2 OTHER HERITAGE REGISTER SEARCH RESULTS

Searches of the AHPI, the RNE and the SHI were undertaken and did not identify any recorded Aboriginal Objects or Places in or around the development area. No Aboriginal objects or places are listed as significant in the *Shoalhaven Local Environmental Plan 2014*.

© 2022 Austral Archaeology

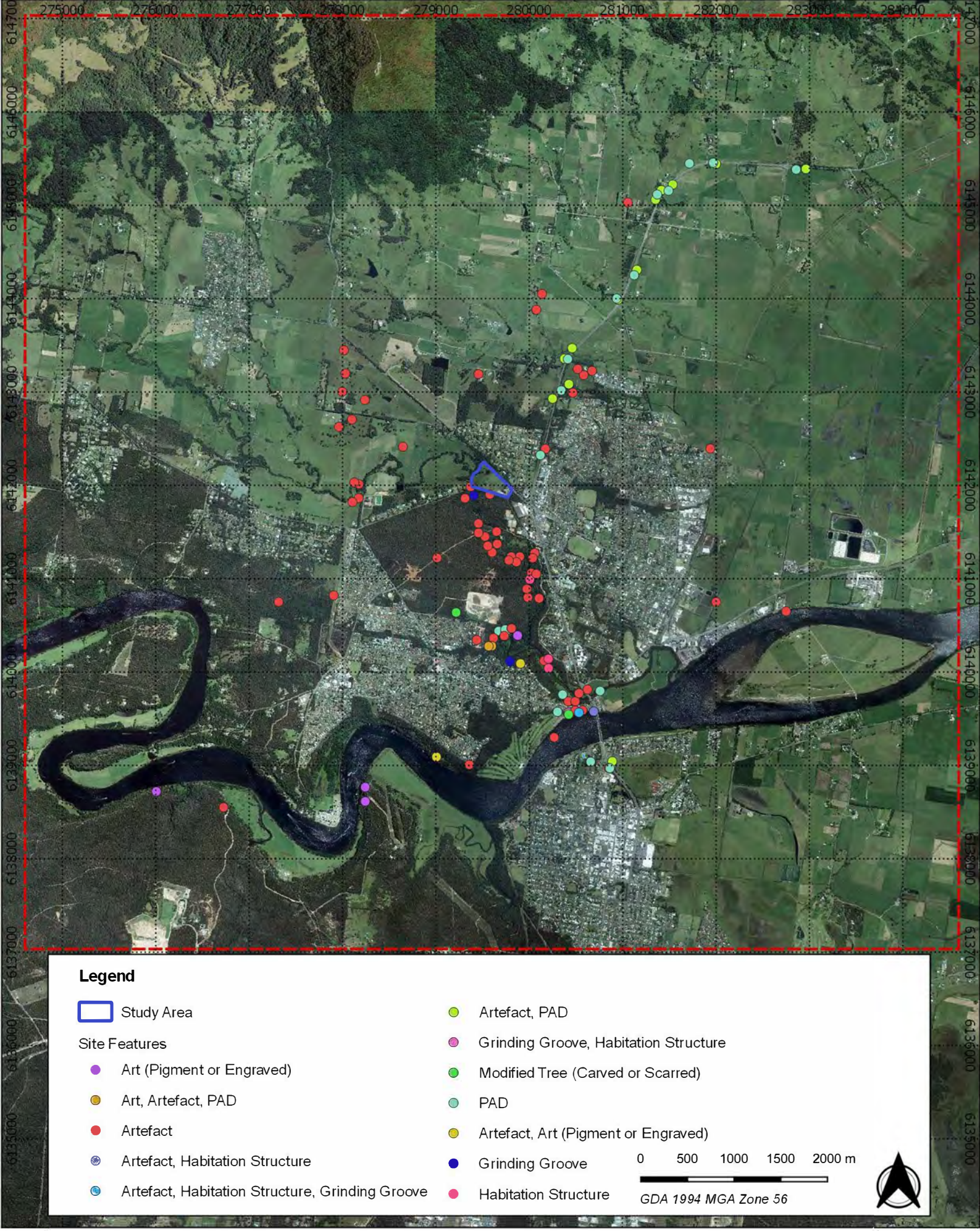


Figure 2-2 AHIMS Listings within 5km of the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Survey Report

Source: NSW DFSI Aerial; AHIMS *Drawn by: WA* *Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

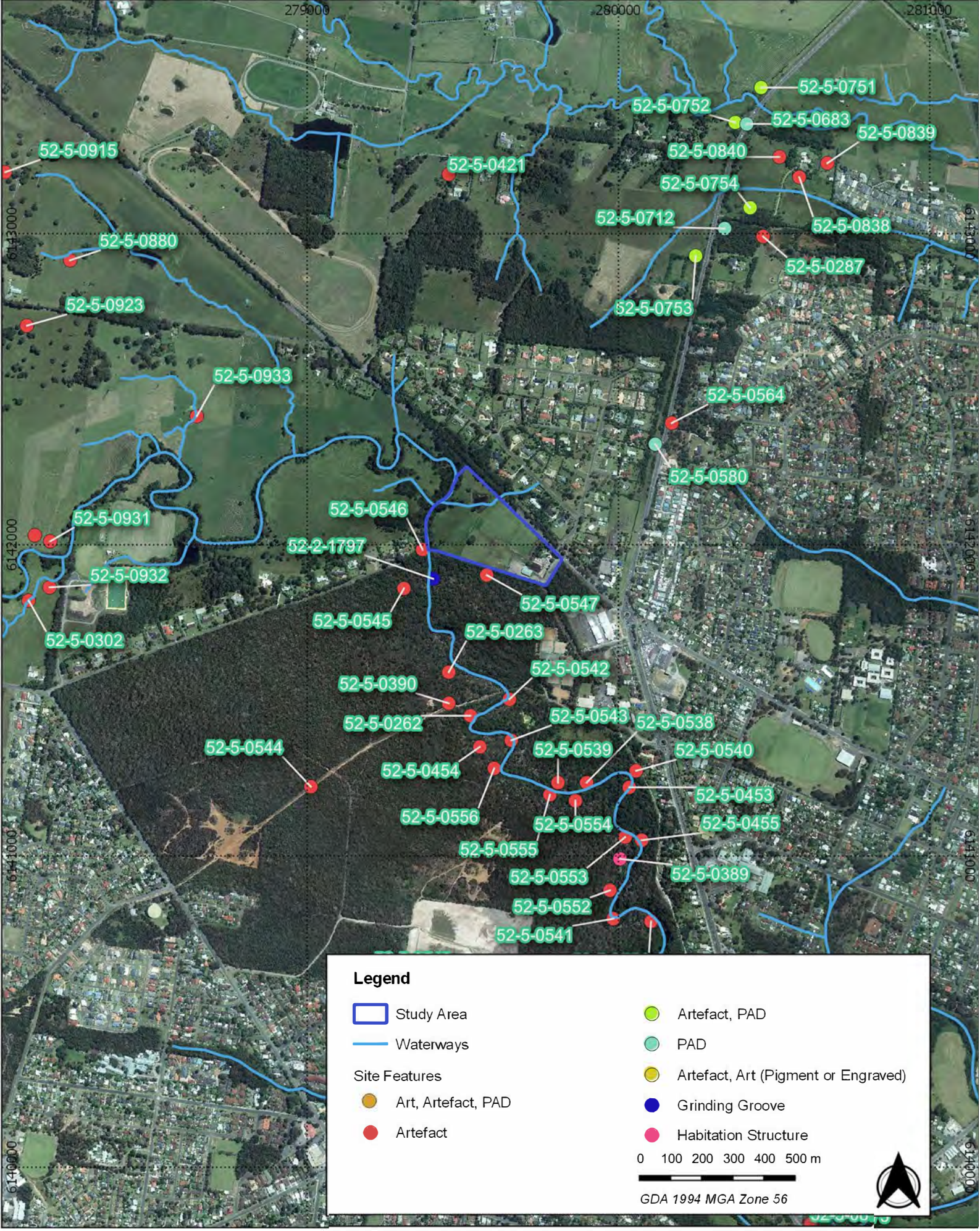


Figure 2-3 Identified AHIMS Listings Nearby to the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Cultural Heritage Assessment Report

Source: NSW DFSI Aerial; AHIMS *Drawn by: WA* *Date: 05/02/2020*

AUSTRAL ARCHAEOLOGY

3 LANDSCAPE CONTEXT

3.1 INTRODUCTION

The natural environment of an area influences not only the availability of local resources, such as food and raw materials for artefacts but also determines the likely presence and/or absence of various archaeological site types which may be encountered during a field investigation.

Resource distribution and availability are strongly influenced by the environment. The location of different site-types (such as rock-shelters, middens, open camp sites, axe grinding grooves, engravings etc) are strongly influenced by the nature of soils, the composition of vegetation cover and the climatic characteristics of any given region. Equally important is the range of other associated characteristics which are specific to different land systems and their geology. In turn, this affects resource availability of, for example, fresh drinking water, plant and animal foods, raw materials for stone tools, wood and vegetable fibre used for tool production and maintenance.

Therefore, examining the environmental context of an area is essential in accurately assessing potential past Aboriginal land-use practices and/or predicting site types and distribution patterns within any given landscape, cultural or not. The information that is outlined below is applicable for the assessment of site potential of the current study area.

3.2 LOCAL GEOLOGY

The study area is located within three geological formations, which includes the quaternary alluvial floodplain geological formation in the eastern section of the study area and the Permian Berry Siltstone formation in the central section of the study area. The quaternary alluvial floodplain is a geological formation that is less than 2.5 million years old and contains current and recent mud, silt, sand and gravel deposited by river systems (Carter et al. 2013). The Permian Berry Siltstone formation is aged between 264 and 265 million years and contains siltstones and shelf deposits of fluvial sands and gravel (Troedson and Hashimoto 2013). The Berry siltstone formation covers the vast majority of the study area.

Both geological formations within the study area lack an abundance of rock types useful for stone tool manufactures such as silcrete, quartz and chert, and are consequently unlikely to contain any potential quarry sites.

3.3 SOIL LANDSCAPES

There are two different soil landscapes within the study area, the Shoalhaven soil landscape and the Nowra soil landscape (Figure 3-3).

3.3.1 SHOALHAVEN

The Shoalhaven sandstone landscape takes up the western portion of the study area and is moderately deep: between 500 millimetres to 1 metre. It consists of six dominant soil formations: Prairie, Red Earths and Yellow and Red Podzolic, Alluvial and Gleyed Podzolic Prairie soils found on levees, Red Earths and Yellow and Red Podzolic soils found on the terraces, and alluvial Soils and Gleyed Podzolic (potential Acid Sulphate) soils located on the floodplains (Hazelton et al. 1992, p.63) .

The Shoalhaven soil landscape is characterised by four different forms within the soil profile. This profile includes sf1, a brownish black to brown colour that is a fine sandy loam that exhibits hard setting behaviour; sf2, a brown to yellowish brown colour that this a weakly pedal light sandy clay loam; sf3, a yellowish-brown sandy clay; and sf4, a reddish-brown colour with a moderately pedal medium clay (Hazelton et al. 1992, p.69).

© 2022 Austral Archaeology

The characteristics of the floodplain are intricate with different soil patterns for levees, lower terraces and upper terraces. The levee soil has a maximum of a 200 millimetre brownish-black fine sandy loam and up to 500 millimetres of brown pedal sandy clay loam with a gradual boundary; the lower terraces are up to 200 millimetres of fine sandy loam overlaying up to 800 millimetres of dull yellowish brown massive sandy clay, with a clear boundary with Yellow Podzolic Soil; and the upper terraces have a maximum of 200 millimetres of fine sandy loam overlying 800 millimetres of a dull reddish brown moderately pedal light medium clay with clear boundaries with Red Podzolic soils at a maximum depth of 1.5 metres. The Nowra landscape also presents with level to undulating floodplains with a less than 5 metres relief and 3% slope (Hazelton et al. 1992, p.68) .

3.3.2 NOWRA

The Nowra soil landscape is a coarse grained, quartz, horizontally bedded sandstone that often contains quartz pebbles (McElroy et al. 1969). The soil landscape takes up the eastern portion of the study area and is also moderately deep, between 500 millimetres to 1 metre. It consists of Brown Podzolic soils which occur on crests and upper slopes, Soloths and/or Yellow Earths which occur on midslope and Yellow Podzolic soils that occur on lower slopes and drainage line (Hazelton et al. 1992, p.81)).

The Nowra soil landscape is characterised by seven forms within the soil profile. This includes no1, a yellowish-brown loose single-grained sand; no2, a yellowish-brown clayey sand that is gravelly and exhibiting hard setting behaviour; no3, a dark reddish-brown loam that is fine sand; no4, a light clay that is mottled; no5, a dark olive-green sandy clay; no 6, a bright brown to dark olive-green, moderately pedal medium clay; and n07, a brown sandy clay loam (Hazelton et al. 1992, pp.82–83).

The layers of the soil vary on crests and upper slopes, midslopes and lower slopes and drainage lines and floodplain. The crests and upper slopes feature a maximum of 400 millimetres of hard setting dark reddish-brown fine sandy loam overlying up to 300 millimetres of dark olive-green sandy clay, which overlying a bright brown moderately pedal light medium clay with Brown Podzolic and clear boundaries; midslopes have up to 100 millimetres of loose yellow sand overlying hard setting gravelly yellowish-brown clayey sand, overlying a bright brown moderately pedal light medium clay with clear boundaries from Soloths to Yellow Earths; the lower slopes and drainage lines have up to 150 millimetres of loose yellow-brown single-grained sand overlying a maximum of 150 millimetres of brown sandy clay loam, overlying up to 700 millimetres of light mottled clay with clear boundaries of Yellow Podzolic Soils; higher elevations have less than 200 millimetres of fine sandy loam, which overlies up to 800 millimetres of dull reddish brown sandy clay loam with a gradual Red Earth boundary. The Nowra landscape has moderately to gently undulating rises to low hills on Nowra Sandstone with a relief of less than 40 metres and slopes less than 5% (Hazelton et al. 1992, p.81). The soil landscapes associated with the study area are outlined in Figure 3-3.

3.4 TOPOGRAPHY AND LANDFORM

The study area is located at the southern section of the Sydney Basin. It is characterised by level to gently undulating riverbeds and banks as well as active floodplains (Hazelton et al. 1992, p.68). The eastern portion of the study area is placed in the Nowra geological landscape. This landform is characterised by the level ground that gently rises into hills that are on sandstone (Hazelton et al. 1992, p.81). .

The local area includes residential areas and agricultural areas as well as sections of bushland. The study area is located adjacent to Moss Vale Road and is bordered on the south side by the Bombaderry Regional Park. Bombaderry Creek (a 5th order creek) is also adjacent to the study area to the west, and connects to the Shoalhaven River, south of the study area. There are two dams located within the study area and it has been used for agricultural activities, with stock/sale yards located within the study area.

The study area has an elevation of >50 metres Australia Height Datum (AHD) at the southern boundary end of the site and >30 metres AHD at the north-western end (Construction Sciences 2020).

© 2022 Austral Archaeology

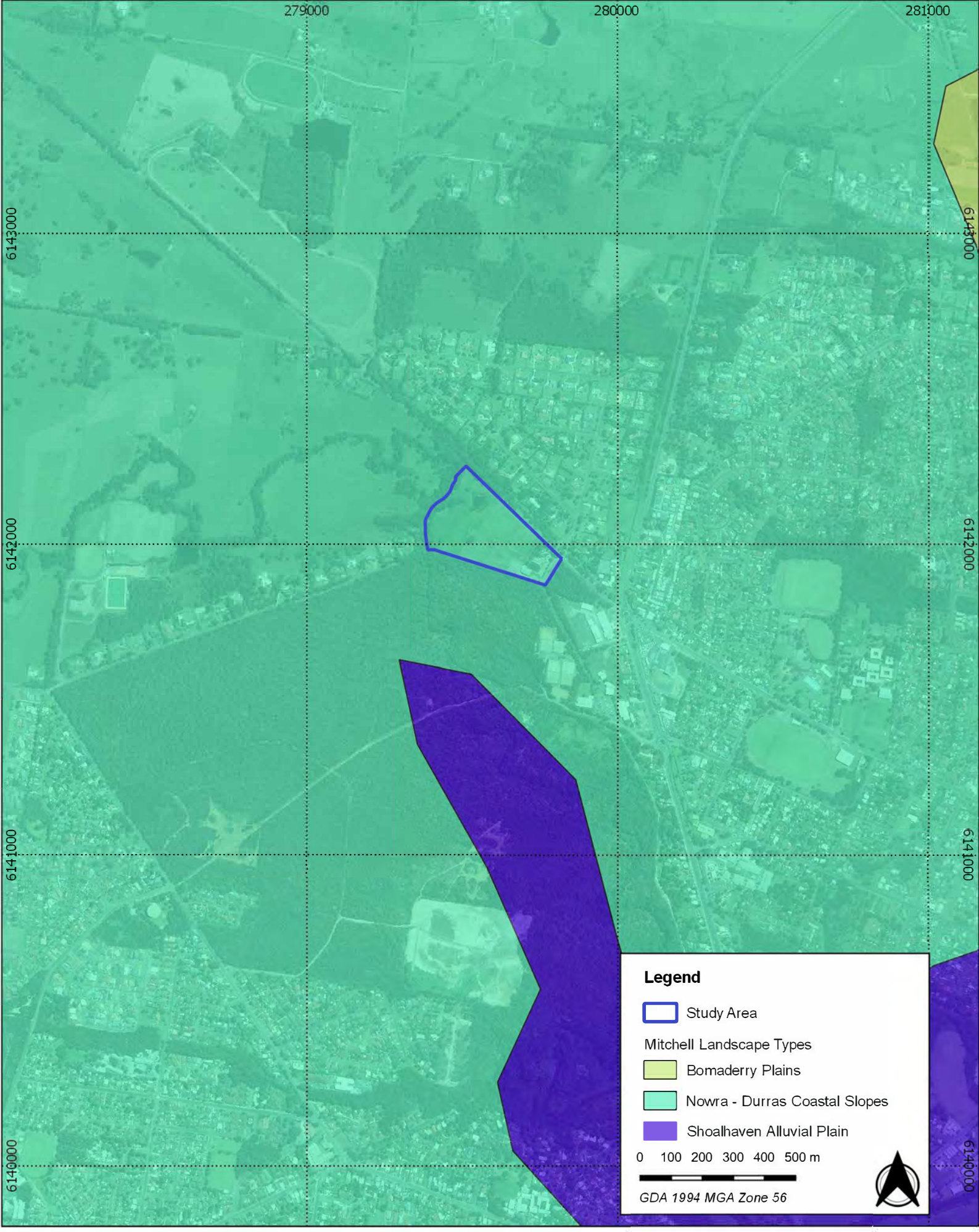


Figure 3-1 Mitchell Landscapes Surrounding the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Survey Report

Source: NSW DFSI Aerial; Mitchell Landscapes V3.1

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY

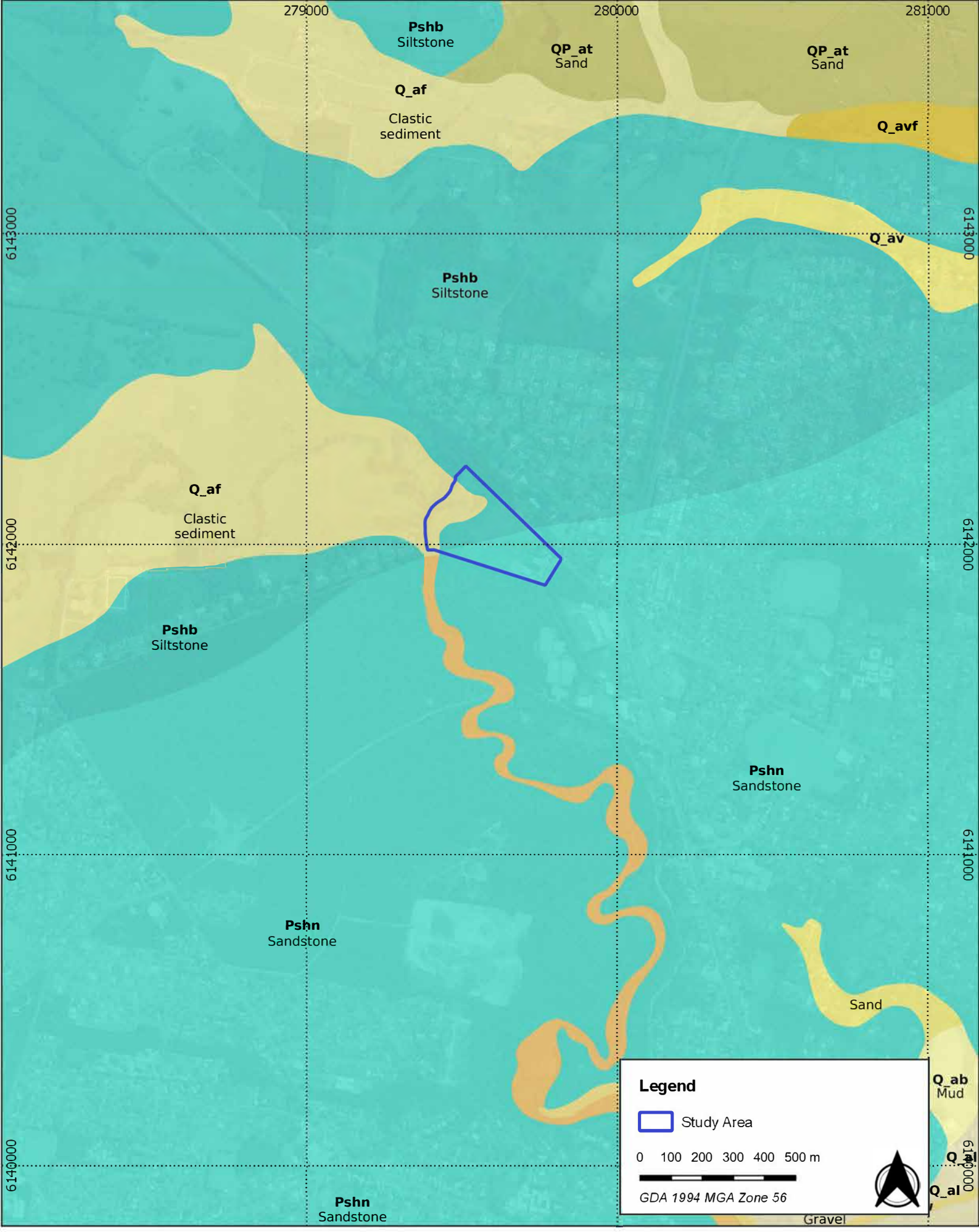


Figure 3-2 - Geological Landscapes Surrounding the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Survey Report

Source: NSW DFSI Aerial; NSW eSpade

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY

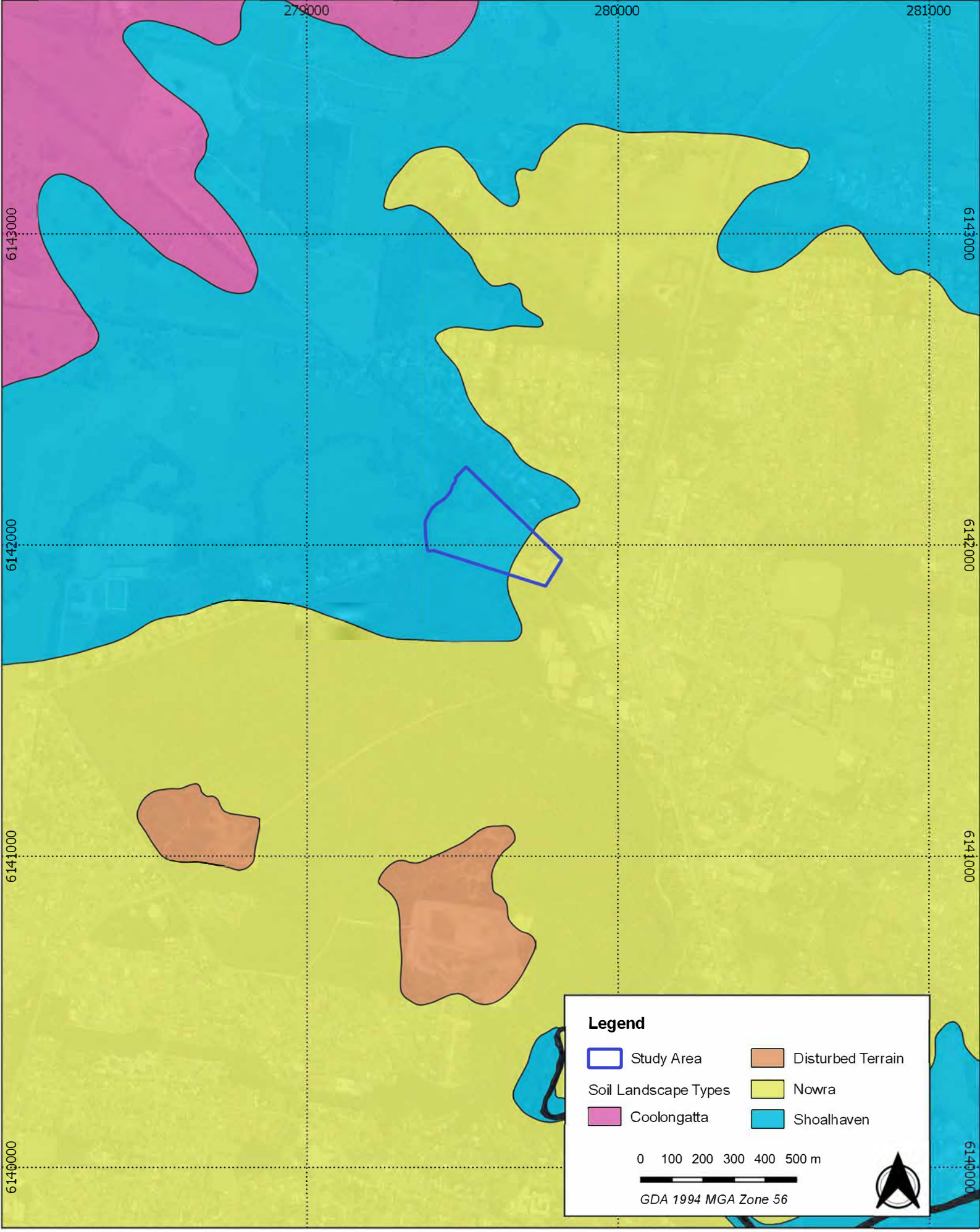


Figure 3-3 - Soil Landscapes Surrounding the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Survey Report

Source: NSW DFSI Aerial; NSW SEED

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY

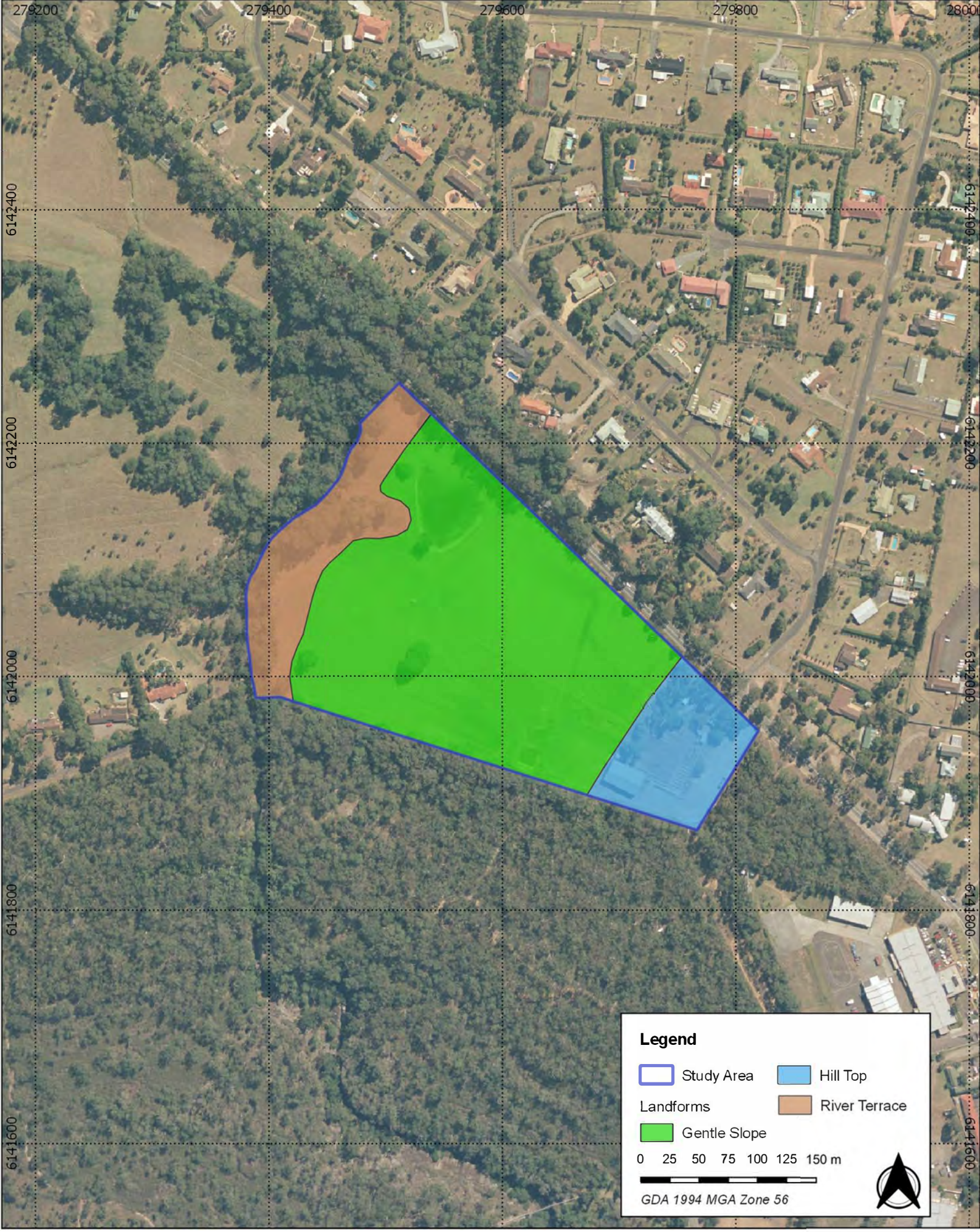


Figure 3-4 - Landforms Evident within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: NSW DFSI Aerial

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY

3.5 HYDROLOGY

The study area is located within the Shoalhaven River catchment area, which has its source in the rugged terrain of Braidwood and flows for 300 kilometres generally in a north-easterly direction into the Pacific Ocean east of Nowra. The Shoalhaven River has a catchment area of approximately 7,250 kilometres^2, making it the sixth largest coastal catchment in NSW. The Shoalhaven River has two mouths – one permanently open at Crookhaven Heads: the other intermittently open at Shoalhaven Heads, approximately 5 kilometres further north. The Shoalhaven River rises in the Southern Tablelands at an altitude of 864 metres above sea level. Four main tributaries drain into the Shoalhaven River catchment: the Mongarlowe River, Corang River, Endrick River and Kangaroo River. Other main tributaries include Ettrema Creek, Boro Creek, Bomaderry Creek and Reedy Creek.

The major watercourse in the vicinity of the study area is Bomaderry Creek, which flows south-east into Shoalhaven River. Bomaderry Creek is a 5th order stream, which runs in a roughly east-west alignment, and forms the western boundary of the study area. The creek fed by two 4th order perennial watercourses, Good Dog Creek and Tapitallee Creek which also run in a rough west-east alignment, flowing down from the escarpment (Figure 3-5). As Bomaderry Creek is a perennial 5th order stream it is likely to have been a source of both fresh water and food for people living in the area. The constant water level would have made this area conducive to many kinds of aquatic life, such as crustaceans and fish, along with other terrestrial animals who came to drink, rest in the cool and eat the abundant flora in the area surrounding the creek.

There is also a small 1st order drainage channel running through the study area toward Bomaderry Creek from the east. This is a very small non-perennial watercourse and is unlikely to have been a source of water or food for any Aboriginal people in the area.

The alluvial flats adjacent to Bomaderry Creek and Good Dog Creek are likely to be prone to flooding events. Flood study and management plans of Bomaderry Creek have been completed by BMT WBM in 2010 and Cardno in 2016 (BMT WBM Pty Ltd 2010, Cardno 2016). These studies used annual rainfall, stream flow records and historical research to predict the likelihood of flooding and the extent of an area that flooding will impact. Both studies have shown that parts of the alluvial flats immediately adjacent to Bomaderry Creek have the potential to experience flood events every 5, 20 and 100 years (Cardno 2016, p.5). The areas that are susceptible to flooding are less likely to contain Aboriginal sites when compared to the elevated hill crests north of the creek lines that are unaffected by flooding. Furthermore, any potential sites within the areas that are subject to frequent flooding will have also been disturbed by flooding events in the past, which would lead to more disturbed archaeological sites and deposits.

© 2022 Austral Archaeology



Figure 3-5 - Hydrology Surrounding the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Survey Report

Source: NSW DFSI Aerial; NSW DCDB

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY

3.6 CLIMATE

The climate of the Nowra region is warm-temperate, ranging from about 20 to 26 degrees Celsius in the summer, and 10 to 16 degrees Celsius during winter. Rainfall totals are highest in the autumn and summer months, with averages of around 1,200 millimetres to 1,600 millimetres in areas near Nowra (Bureau of Meteorology 2019). This moderate climate would have allowed Aboriginal people to use the study area to move between the coastline and further inland through the Cambewarra range, along Shoalhaven River.

3.7 FLORA AND FAUNA

Prior to the removal of the natural vegetation, the ecological diversity of the area would have provided a wide range of resources for Aboriginal people. The Shoalhaven landscape is almost completely cleared except for small concentrations of *Melaleuca quinquenervia* (decorative paperbark), *Quercus bicolor* (swamp oak), *Brachychiton acerifolius* (Illawarra flame trees) and various reeds. Similarly, the Nowra landscape has also been nearly completely cleared, however it still retains several species of trees, including *Syncarpia glomulifera* (turpentine), *Eucalyptus punctata* (grey gum), *Corymbia maulata* (spotted gum), *E. piperita* (Sydney peppermint), *E. obliqua* (thin-leaved stringybark), *C. gummifera* (red bloodwood), *Allocasuarina toruloa* (forest oak) and *E. piluaris* (blackbutt) (Wesson n.d., Stewart & Percival 1997). The soft, spongy bark of the Illawarra flame tree was used to make nets and fishing lines, sap from the red bloodwood trees were utilised to tan fishing nets and stain artefacts. Swamp oak bark provided material for canoe making and bark from the paperbark tree was used for bedding and blankets (Wesson n.d.). Many of the vegetation species found within the vicinity of the study area were crucial for Aboriginal people and were used for numerous purposes as well providing habitat for faunal resources (Attenbrow 2003).

The study area and its surrounds would have provided habitats for mammals including kangaroos, brush-tail possums, sugar gliders and common wombats, and the rivers and creeks nearby would provide access to additional faunal resources such as fish species, a range of water birds and a variety of lizards. These resources would have provided food for Aboriginal people travelling between the coastline and further inland along Shoalhaven River and its tributaries (Attenbrow 2003).

As well as being important food sources, animal products were also utilised for tool making and the production of ceremonial items. Examples include ‘bone points’, which would have functioned as awls or piercers, as well as tail sinews, which were used to make fastening cords. Animals such as brush-tailed possums were highly prized for their fur, with possum-skin cloaks (Attenbrow 2003) .

3.8 PAST LAND USE PRACTICES

The study area has been previously cleared of vegetation, likely during the days of early European settlement when logging and clearance for agricultural activities was undertaken. Vegetation clearance has occurred throughout most of the study area, which has resulted in erosion along the slopes and creek banks of Bomaderry Creek to the immediate east of the study area.

The first European occupation within the study area was in the 1830s when 1,280 acres of land was granted to Alexander Berry in the Cambewarra and Nowra regions. The land associated with Berry’s grant was known as ‘Cumbewarra Farm’. Berry was one of the first landholders in the region and gave his name to the modern town of Berry, approximately 15 kilometres north-east of the study area. Berry’s grant formed a small part of his land holdings, which totalled to 57,000 acres (Biosis Pty Ltd 2017, p.17).

From the earliest phase of occupation of the study area until recent years, the land has been primarily used for agricultural purposes, specifically cattle grazing. In addition, farming activities such as the construction of vehicle tracks, fencing and a small dam in the northern portion of the study area has also modified the landscape and disturbed the ground surface.

© 2022 Austral Archaeology

As such, much of the study area is considered to contain low to moderate levels of disturbance due to the agricultural activities, such as livestock grazing and ploughing, construction of access tracks and fencing. It was assessed by Biosis (2018, p.17) that these historic activities would have only caused minor disturbances to the upper soil profiles.

Therefore, previous agricultural activities and land clearance of the study area would have resulted in topsoil movement and potential loss of topsoil, which would have accounted for widespread artefact displacement rather than the complete destruction of Aboriginal sites and the limited archaeological potential across this disturbance zone is more likely to reflect the inherent unsuitability of much of the terrain for occupation than the prior loss of the potential resource.

The locality around Bomaderry and Cambewarra was settled and cleared in the 1850s, and the area swiftly grew in size with a store, post office, stores, hotels and two schools by the 1870s (Peter Freeman Pty Ltd & JRC Planning Services 2003). Located within the boundaries of the study area was a tannery owned by Thomas Shepherd (Daily Telegraph 1896). The tannery was likely converted to a factory sometime after Shepard's death in 1923 (Shoalhaven Telegraph 1923). This factory can be clearly seen in a crown plan dated to 1955, that deals with the study area (Figure 3-6) The aerial image dated to 1961 shows the land cleared and no buildings at the site (Figure 3-7). Sometime between 1961 and 1979 additional buildings were constructed at the eastern end of the property (Figure 3-8). The study area today consists of cleared pastures for farming, commercial and residential structures.

The site itself has been used for agricultural practices with livestock structures and clearing of the land as well as the construction of two dams on the property; one in the north-west corner, built prior to 1961 (Figure 3-7) and another built between 1997 and 2003 in the south-east part of the property (Figure 3-10).

3.9 POTENTIAL LAND USE IMPACTS ON THE ARCHAEOLOGICAL RESOURCE

The main impacts on the subject land relate to past agricultural practices, extensive land clearance, animal grazing, construction of fences and development of a yard sale area. These activities would have contributed to the removal of the original native vegetation and the study area has recently been used for animal agricultural practices.

Land clearance would have resulted in soil disturbance and topsoil movement, coupled with erosion on slopes across the majority of the study area, accounts for widespread artefact displacement rather than the complete destruction of Aboriginal sites and the limited archaeological potential across this disturbance zone is more likely to reflect the inherent unsuitability of much of the terrain than the prior loss of the potential resource.

Table 3-1 Summary of past land uses within the study area, and the potential impacts on archaeological resources

Past Land Uses	Potential Impacts on Archaeological Resources
Historical land clearance	Loss of native trees, shrubs and grasses and livestock grazing would lead to the potential loss of scarred trees, increased erosion and potential dispersal or disturbance of surface and subsurface artefacts across the predominantly sloping terrain of the study area.
Agriculture	Ploughing and harrowing as well as livestock movement and grazing would have exacerbated topsoil disturbance and erosion across the sloping terrain over much of the study area
Construction of stock yards and fencing associated with farming practices	Moderate to high levels of earth disturbance leading to the potential disturbance and dispersal of artefacts from their stratigraphic context.

© 2022 Austral Archaeology

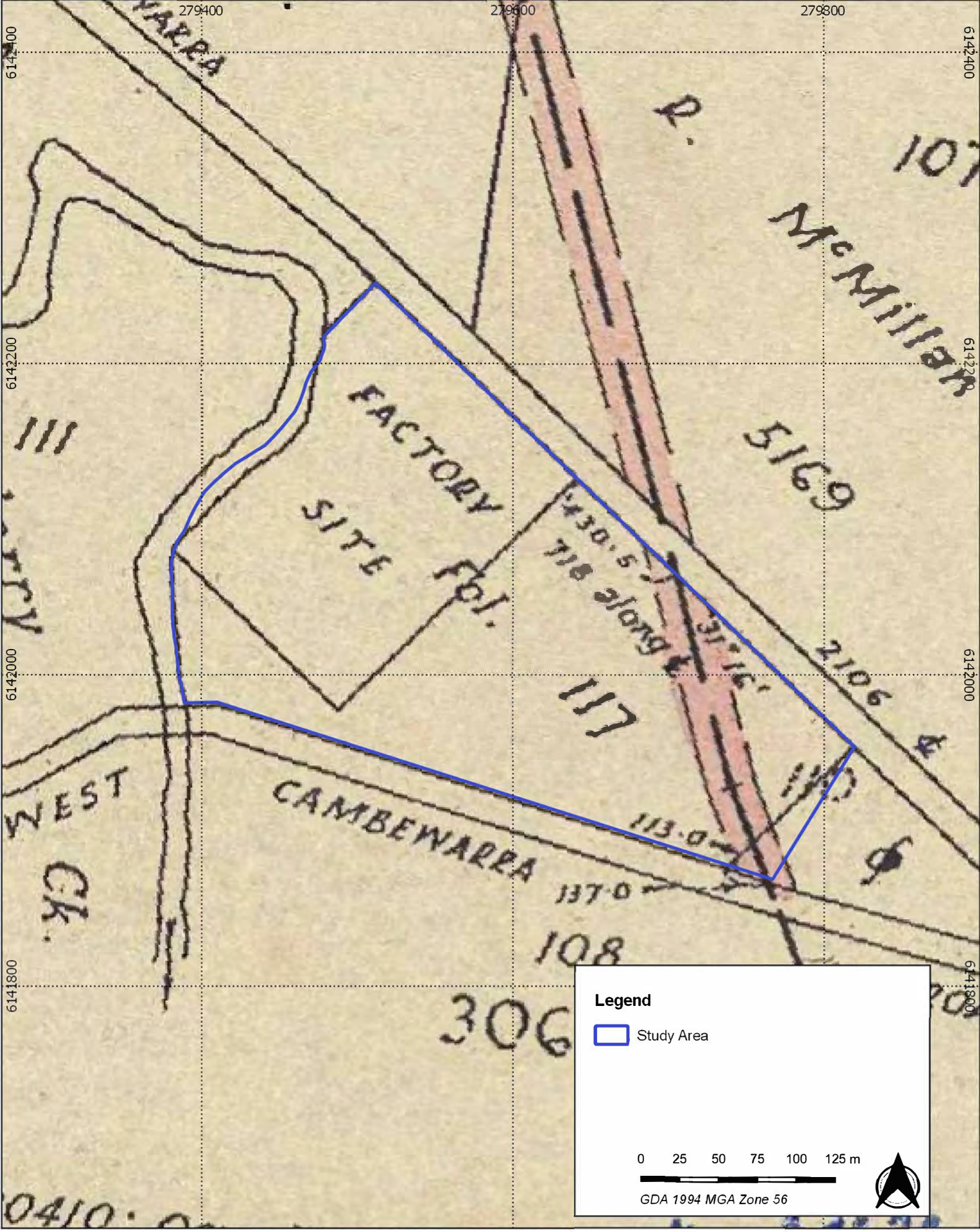


Figure 3-6 - 1955 Crown Plan of the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Crown Plan Ms.16379.3000

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY



Figure 3-7 - 1961 Historic Aerial Photography

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Survey Report

Source: LPI 1079_3N_007

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY



Figure 3-8 - 1979 Historic Aerial of the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Survey Report

Source: LPI 2783_06_024

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY



Figure 3-9- 1997 Historic Aerial of the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Survey Report

Source: LPI 4344_05_088

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY



Figure 3-10- 2003 Historic Aerial of the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Survey Report

Source: LPI 5959_03_040

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY

4 PREDICTIVE STATEMENT

In general, an archaeological predictive statement for any study area draws on surrounding environmental data, previous archaeological research and predictive models for Aboriginal occupation. Another essential aspect to predicting the archaeological integrity of a site and something that must be considered is previous land uses of the study area and degree of disturbance.

In summary, the main trends broadly seen across eastern NSW are that:

- Archaeological sites occur a wide variety of landforms.
- Site frequency and density are dependent on their location in the landscape.
- There is a dominance of low-density surface open artefact scatters and isolated finds.
- Artefact scatters are commonly located in close proximity to permanent water sources along creek banks, alluvial flats and low slopes, largely concentrated within the first 100 metres of a creek line. More complex sites are usually located close to water sources with major confluences being key locations for occupation sites. Raised, level areas in proximity to water sources are particularly sensitive.
- Archaeological material is also present beyond the immediate creek surrounds in decreasing density with distance from water.
- There may be concentrations of sites occurring on ridge tops and crests that are associated with pathways through the landscape.
- Subsurface archaeological deposits are often found in areas where no visible surface archaeological remains are evident.
- The dominant raw material used in artefact manufacture is silcrete and fine grained silicious material with smaller quantities of chert, quartz and volcanic stone.
- Artefact assemblages usually comprise a small proportion of formal tool types with the majority of assemblages dominated by flakes and debitage.
- While surface artefact scatters may indicate the presence of subsurface archaeological deposits, surface artefact distribution and density may not accurately reflect those of subsurface archaeological deposits.
- Aboriginal scarred trees may be present in areas where remnant old growth vegetation exists.

While these statements provide an adaptable framework for applying a predictive model to the study area, based on the previous models it is possible to further expound on the generalisations made above. The general studies of the Shoalhaven region, the specific investigations surrounding the study area and the search of the AHIMS database have helped to predict what certain site types can be expected within the study area.

The study area contains landforms that have been shown to contain Aboriginal objects in other nearby areas. Simple slopes with a low gradient and proximity to a reliable source of water (Bomaderry Creek and Shoalhaven River) indicate moderate to high potential for the presence of Aboriginal heritage sites such as artefact scatters or isolated artefacts. The southwestern to western extents of the study area have higher potential. Sites that may be present within the study area are:

- Surface open camp sites or isolated finds of flaked or ground stone are likely to occur.
- Grinding grooves have potential to be present as suitable underlying geological conditions occur, as evidenced by the occurrence of site 52-2-1797 to the south. Nonetheless, actual occurrence is unlikely either through lack of exposed surfaces, or burial of those surfaces through sediment movement. area.
- Potential Archaeological Deposits (PADs) have been previously recorded in the region across a wide range of landforms. PADs are likely to be present within areas that are in close vicinity to a water source or on high points.

© 2022 Austral Archaeology

- Scarred trees are unlikely to be present, as areas of old-growth native vegetation are not present in the study area. While sparse shell pieces have been found in limited prior studies, there is no suggestion these occurrences have a cultural origin. The location of the study area is not conducive to the occurrence of middens.

© 2022 Austral Archaeology

5 ARCHAEOLOGICAL FIELD METHODS

A site specific investigation methodology has been developed for the project that complies with the requirements of the Code of Practice (DECCW 2010a).

5.1 SURVEY METHODOLOGY

A visual inspection of the study area was undertaken on 20 February 2020 by Neil Fenley (Senior Archaeologist, Austral). The visual inspection consisted of a systematic survey of the study area to identify and record any Aboriginal archaeological sites visible on the surface, or areas of Aboriginal archaeological potential and cultural sensitivity. The archaeological survey was conducted on foot. The methods used during the visual inspection conformed to the Code (DECCW 2010e).

5.1.1 SURVEY OBJECTIVES

The objectives of the survey were to:

- Complete a systematic survey that targets areas that have been identified as having the potential to contain Aboriginal heritage values.
- Identify and record Aboriginal archaeological sites visible on the ground surface and areas of PAD.

5.1.2 SAMPLING STRATEGY

The survey methodology was designed to optimise the investigation of areas where archaeological materials may be present and visible, as well as investigation of the broader archaeological potential of all landform elements present within the study area, which included:

- Hill slope
- Gentle Slope (Mid-slope)
- Creek terrace

The specific survey methodology developed for this assessment was guided by the survey requirements as set out in Requirement 5 to 10 of the Code of Practice (DECCW 2010a) and based upon consideration of the overall landform pattern within the study area, known landform elements (after Speight 2009) and the location of the previously identified sites. The survey targeted portions of the study area which reflected previous research.

5.1.3 SURVEY METHODS

The archaeological survey consisted of pedestrian transects walked in a generally east-west orientation. The two key factors in any archaeological survey are ground visibility and exposure. Ground visibility is measured by the estimation of ground surface area which is not covered by any vegetation, and exposure is defined by the areas where surface soils and vegetative matter afford a clear assessment of the ground. These two factors were the key target of survey assessment undertaken across the study area within each landform element. Overall survey coverage and calculated survey effectiveness were recorded. Any disturbances across the study area were recorded.

Photographs were taken of all survey units and landforms as well as representative surface visibility, surface exposures, soil profiles and disturbances relevant to the interpretation of the stratigraphic conditions and archaeological potential within each survey unit.

The effectiveness of archaeological survey is greatly affected by the ability to see stone artefacts on the ground. Any form of ground cover such as pasture, leaf litter will impede the ability to see artefacts. The subject area had very low surface visibility due to the area being heavily pastured. There were some areas that afforded better surface visibility, such as farm access tracks and eroded areas such as crests of erosion control banks and dam banks. Table 5.1 summarises approximate archaeological visibility and effective coverage of the study area.

© 2022 Austral Archaeology

Of the ~8.88ha study area Table 5.1 illustrates that 7000m2 (0.7Ha) was examined and of that ~270m2 was effectively covered. This represents approximately 0.31% of the study area and is considered low effective coverage.

As noted in Section 3, the study area is located within the Shoalhaven (sf) soil landscape in the west and Nowra (no) soil landscape in the east. These interfaces of the soil landscapes align with the hilltop and gentle slope landform. The fluvial Shoalhaven soil landscape has been formed by the deposition and scouring of alluvial sediments during flood events. Flooding would cause any potential sites to be repeatedly scoured by water and then covered with sediments during flooding events. It was assessed, however, that only lower alluvial flats that are susceptible to flooding from Bomaderry Creek and which would most likely cause disturbance to Aboriginal archaeological sites, are located to the west of the study area in lower elevated areas and in closer vicinity to Bomaderry Creek.



Figure 5-1 Landscape view of the hill slope



Figure 5-2 Landscape view of the gentle slope landform within the study area

© 2022 Austral Archaeology



Figure 5-3 View of the cattle yards facing east



Figure 5-4 View of the cattle yards facing north-east

© 2022 Austral Archaeology



Figure 5-5 View of the creek landform

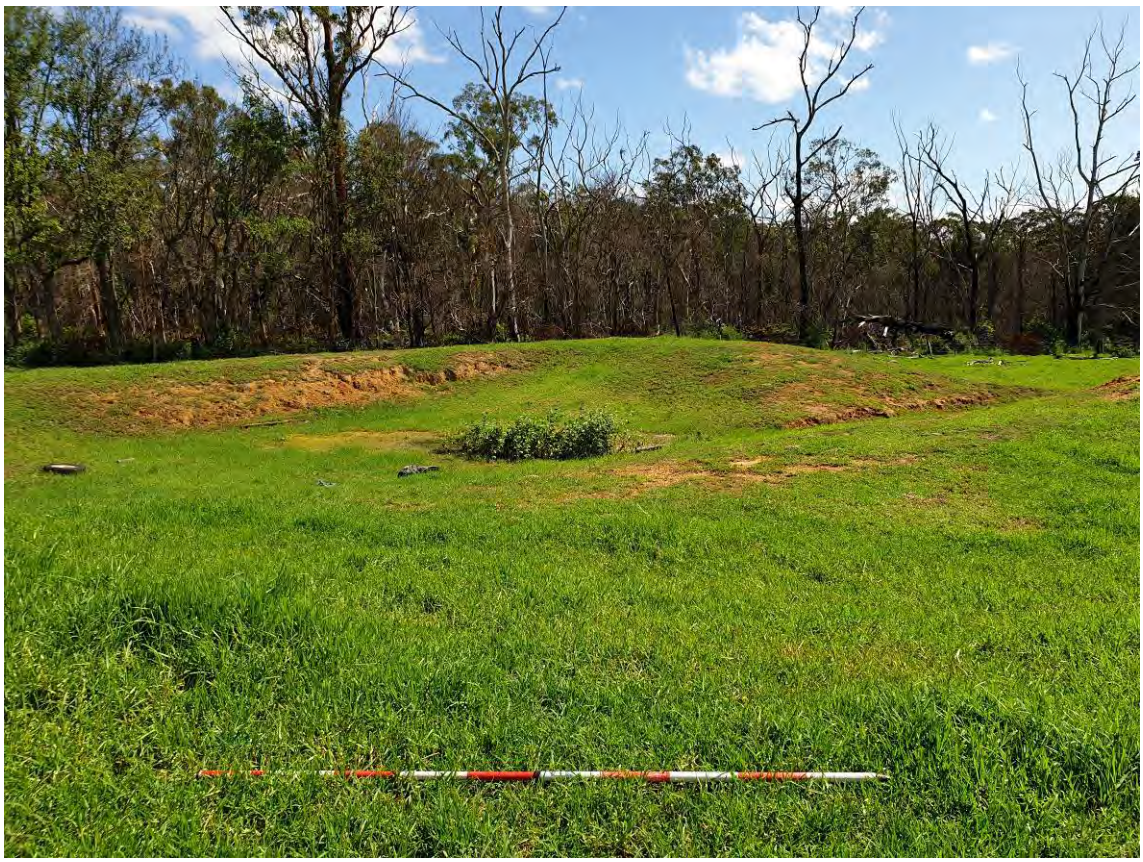


Figure 5-6 View of the dam in the south-west portion of the study area facing north.

© 2022 Austral Archaeology



Figure 5-7 Survey Transect Map

2109 - 25 Moss Vale Road - N27790

Source: NSW LPI Basemap

Drawn by: AH Date: 2021-08-31

AUSTRAL ARCHAEOLOGY

5.2 TEST EXCAVATION METHODOLOGY

5.2.1 TEST EXCAVATION OBJECTIVES

The objectives of the test excavation were to characterise the nature, extent and archaeological significance of Aboriginal objects associated with the two areas (gentle slope and creek terrace) identified as areas of moderate to high potential within the study area. The third landform of hilltop was assessed to have undergone a high degree of disturbance from the construction of cattle yards, sheds and roads/parking.

5.2.2 TEST EXCAVATION METHODOLOGY

The test excavation program was undertaken according to the prescribed methodology of Requirement 14 to 20 and 23 to 26 of the Code of Practice (DECCW 2010a). Specifically, Requirement 15b of the Code of Practice, stipulates that a sampling strategy must be developed for all test excavations which take place prior to work commencing (DECCW 2010a, p.25). It is a requirement that test pits must be placed on a systematic grid designed to target both areas likely to contain PADs and the location of proposed impacts. Test pits must be located a minimum of 5 metres apart.

Each test pit was excavated following Requirement 16a of the Code of Practice using mattocks, shovels and trowels (DECCW 2010a, p.26). Sample units measured 500 millimetres^2, with the first test pit excavated in 50-millimetre spits to act as a geomorphologic example and the remaining test pits were excavated in 100-millimetre spits. The excavation was undertaken until the B-horizon was reached and then continued for another 100 millimetres to confirm that the following spit was culturally sterile. In general, the decision to stop excavating was made at the top of the C horizon; when a higher percentage of clay was evident, or coffee rock was encountered.

The test pits were generally placed at 20 metre intervals along predetermined transects and then they were numbered at the time of sampling design (Test pits 1-21). This numbering was followed in the field, with additional test pits numbered sequentially at the time of excavation. Ten metre intervals were necessary in a number of instances to avoid the risk involved in proximity to the dam and to avoid thick roots. Where artefact clusters were encountered further test pits were excavated to determine the extent of the scatter. Test pit 10 was extended to a 1 metre x 1 metre test pit with additional quadrants being labelled TP24, 25 and 26, a further two more test pits were excavated at 10 metre intervals to the north and south respectively (TPs 22 and 23). Test pits 1 and 4 were obstructed by shallow rocks – at or above 100 mm in depth - and excavation was moved 1 metre at both of these locations. These test pits were recorded as 1B and 4B respectively.

SIEVING

On site processing of excavated soils and artefact, retrieval was undertaken via a combination of dry sieving through both a 5-millimetre and 3-millimetre nested sieve or solely through a 3-millimetre sieve, dependent on the nature of the material. Artefacts were collected from the sieves and placed in bags according to test pit provenance. Buckets containing material from the same spit were kept together and separate from other spits. All test pits were backfilled with the available material retrieved from the sieving location upon completion of the recording.

5.2.3 RECORDING

Detailed recording of all pits was undertaken, requiring the completion of an excavation recording form for each spit excavated. The form necessitated detailed descriptions of the soil profile, any evidence of disturbance and/or features, as well as depth of excavation and the number of artefacts and inclusions present. For each artefact a separate plastic bag was annotated with the project name, transect number, test pits number, spit number, date and recorder's initials.

Photographic recording occurred at the completion of each pit or when an archaeological feature was uncovered. A photographic record was taken of at least one wall section in each test pit. Together with a section drawing and stratigraphic photogrammetry from each pit, the photographs allowed for a detailed record of the strata present at the site.

© 2022 Austral Archaeology

5.2.4 ANALYSIS OF EXCAVATED MATERIAL

A lithic analysis was conducted by Pauline Ramsey (Austral). The lithics analysis was aimed at primarily identifying the presence of culturally modified lithic material within the archaeological record, with a secondary goal of identifying material, tool types and any indicators of *in situ* reductions that informs depositional integrity. All of the artefacts recovered were taken to temporary storage at the Austral Archaeology office in Albion Park (NSW) and are to be reburied within the study area. Aboriginal stakeholders are to be consulted as to an appropriate area to relocate these artefacts. A new AHIMS site card for the location where the artefacts are to be relocated is to be created and lodged with the AHIMS registrar.

5.3 ARTEFACT COLLECTION AND STORAGE

Collection of all artefacts will be undertaken according to the following methodology. Austral has allowed for the analysis of a maximum of 100 artefacts as part of the testing program.

Each artefact identified during the subsurface testing was relocated and temporarily stored at Austral's office located at 1/148 Tongarra Road, Albion Park, NSW. After the submission of the final ACHA, the collected Aboriginal material will be taken to a location within or near the study area previously agreed upon by Allen Price and Scarratts and all registered Aboriginal stakeholders for reburial in accordance with requirements of the Code.

A GPS recording of the location will be made and recorded as a new Aboriginal site. A site card will be completed, and the resulting site registered on the Heritage NSW AHIMS database.

Should it be necessary to move these artefacts at a later date, it is a requirement that a Care and Control agreement be completed as part of any AHIP application. This will require the identified Aboriginal stakeholders and Heritage NSW will be consulted over a suitable relocation site. This new site will also require GPS coordinates and all necessary details to be recorded with the Heritage NSW AHIMS.

Figure 5-8 and Figure 5-9 outlines the location of all excavated test pits in the identified landforms within the study area.

© 2022 Austral Archaeology

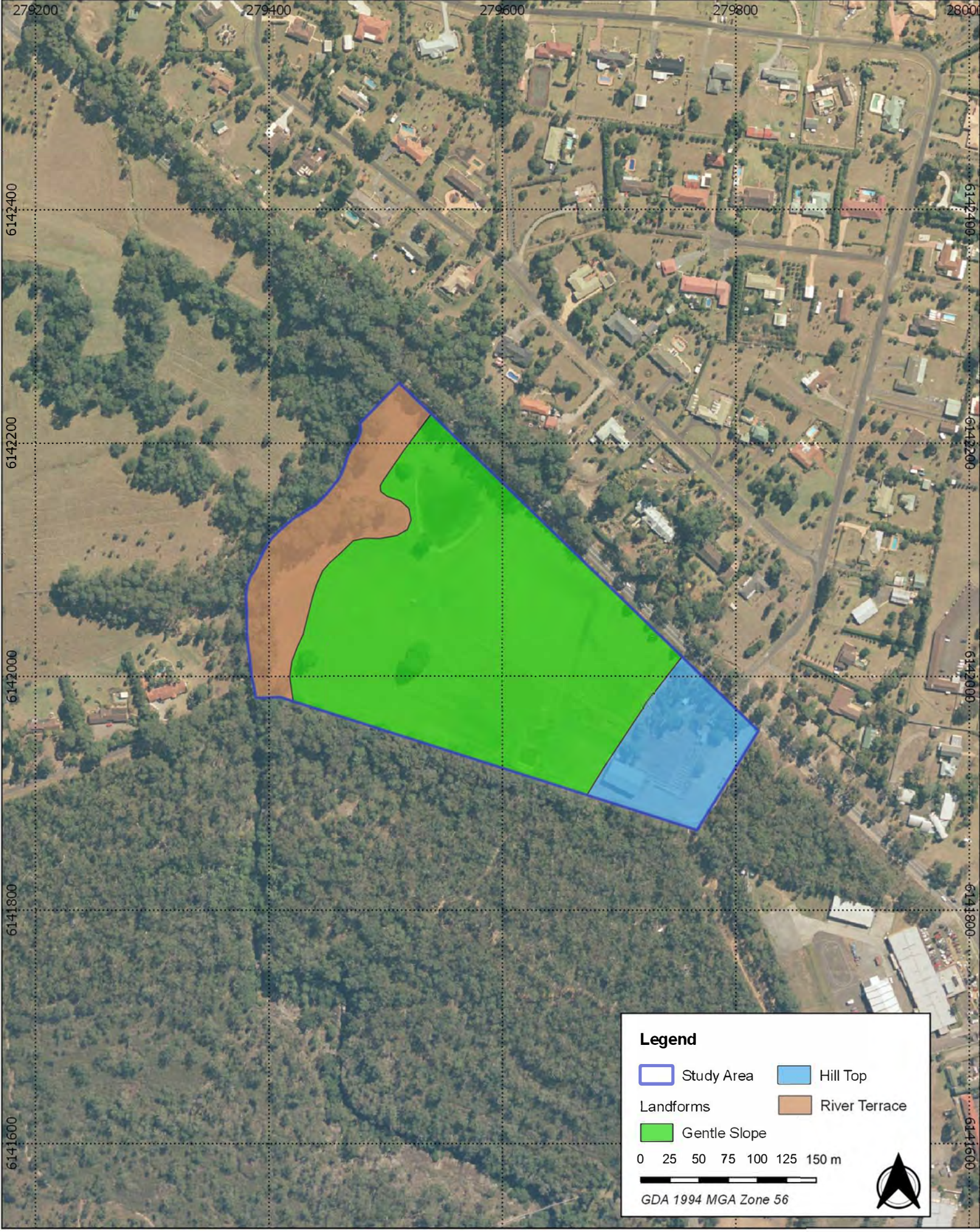


Figure 5-8 - Landforms Evident within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: NSW DFSI Aerial

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY

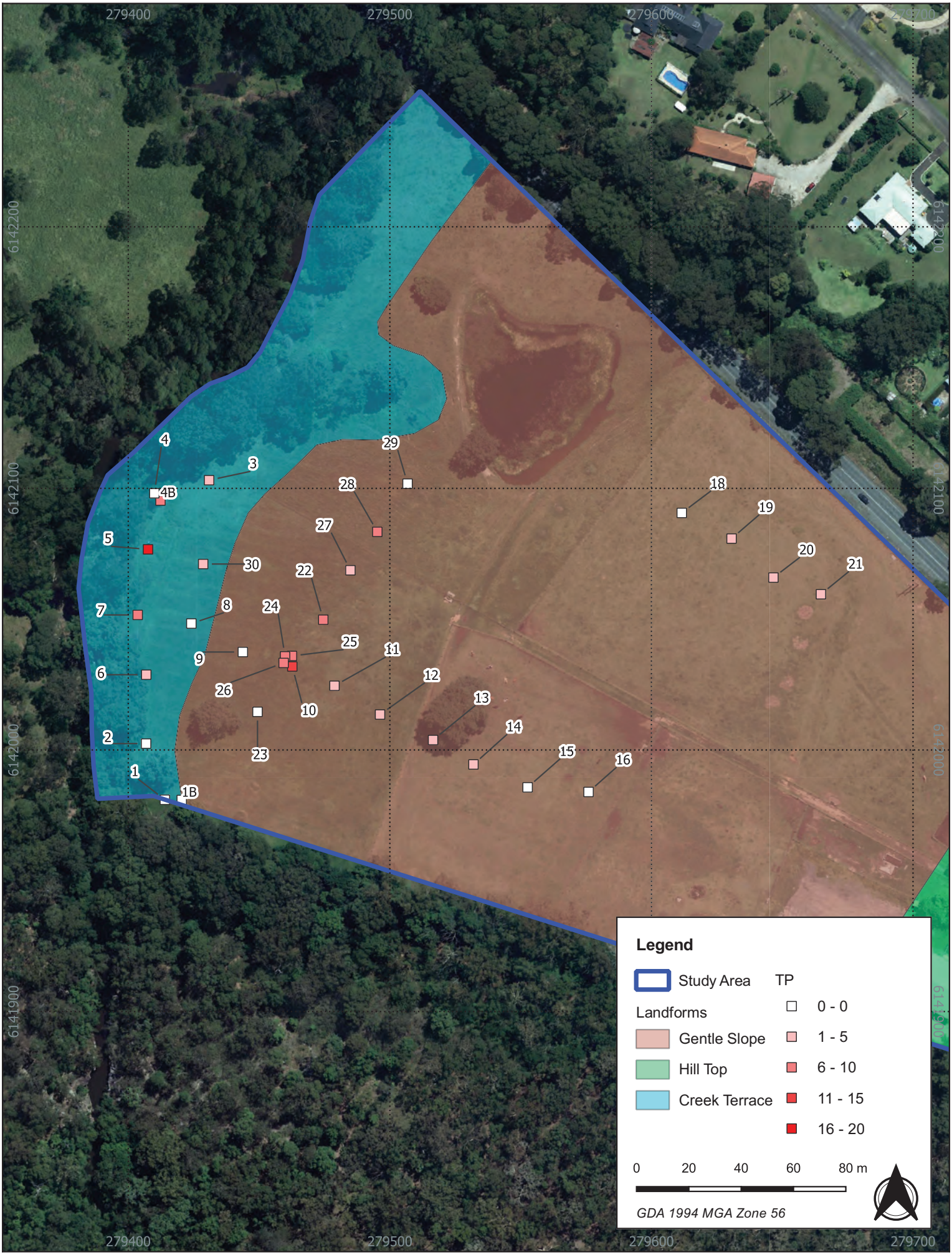


Figure 5-9- Test pits Location

2109 - 25 Moss Vale Road - N27790

Source: NSW LPI Basemap

Drawn by: SS Date: 2021-09-01S

AUSTRAL ARCHAEOLOGY

6 ARCHAEOLOGICAL RESULTS

6.1 SURVEY RESULTS

An archaeological survey of the study area was undertaken on 20 February 2020 by Neil Fenley (Senior Archaeologist, Austral). No Aboriginal objects or sites were identified in the study area, possibly due to the extensive grass coverage limiting the ground surface visibility. The survey encompassed approximately 84,883 metres^2 and identified two areas of moderate to high archaeological potential for containing subsurface Aboriginal cultural material. The study area has undergone many disturbances in the past which have affected all landforms present to differing degrees. Dense grass covered the majority of the study area, and it was only areas associated with the cattle yards which had visibility or exposure, although this was on imported hard base to allow for all-weather access to the yards. Away from the yards, there was little visibility in areas other than at the dams, which were heavily disturbed and had low archaeological potential. It was assessed that visibility was 1% over the gentle slope and river terrace landforms and 50% on the hilltop where the yards are located. There was an average of 1% exposure across all three landforms.

The hilltop landform, measuring 11,477 metres^2, has been heavily disturbed by the construction of cattle yards and associated infrastructure. This has involved levelling of the ground, installation of services including effluent drains, electrical conduits and water pipes. As a result of these works, the archaeological potential in this area was assessed as very low.

The central section of the study is a heavily grassed gentle slope measuring 59,302 metres^2 that and has had a moderate level of disturbance occur in the form of tree clearing and ploughing to sow pasture grass. Although this area had undergone a moderate amount of disturbance, the soil profile of the slope itself appeared to be generally intact. It was deemed that this slope, leading down to Bomaderry Creek, had a moderate level of archaeological potential to have surviving, intact sub-surface deposits which may contain Aboriginal cultural material. There are two dams, one in the south-east and one in the north-west of the gentle slope; the construction of these would have heavily impacted on any surface or sub-surface deposits and therefore have no archaeological potential.

There is a flat, river terrace adjacent to Bomaderry Creek in the western section of the study area measuring 14,101 metres^2 and this moderately disturbed area has moderate to high archaeological potential. The flat surface above the water source and flood levels would have made an ideal occupation area.

The survey achieved a 0.31% coverage over the study area as can be seen in Table 6-1 and there were no obstacles that prevented access. within the study area. This very low coverage rate is a result of the extremely thick and dense grass coverage across the study area

The archaeological survey of the study area was completed with the following conclusions:

- No Aboriginal artefacts or sites were identified in the study area.
- There was very poor surface visibility across the majority of the study area.
- Two landforms - the gentle simple slope and creek terrace were identified as areas of moderate to high archaeological potential.
- The study area has been subjected to moderate to high disturbance from past land use practices. The hill slope was seen as a highly disturbed landform due to the cattle yard construction and associated infrastructure.
- It was determined that areas of the simple slope and creek terrace should be subject to test excavation to better define the nature of any archaeological material present.
- Figure 5-7 provides a detail of the transects walked over within the study area during the archaeological survey.
- The survey achieved a 0.31% coverage over the study area Table 6-1. shows the details of the archaeological survey conducted in the study area.

© 2022 Austral Archaeology

Table 6-1 Effective Survey Coverage

Survey Unit	Topo	Distance (m)	Transect Width	Area Examined (m^2)	% of study area	Visibility %	Effective Coverage (m^2)	Effective Coverage (%)
1	Hill top	500	2	1000	1.17	1	10	0.01
2	Gentle Slope	2500	2	5000	5.89	5	250	0.29
3	Creek Terrace	500	2	1000	1.17	1	10	0.01
				7000	**8.23%**		**270**	**0.31%**

Figure 5-1,Figure 5-2 and Figure 5-5 show the landscape features of the three identified landforms within the study area.

The archaeological survey of the study area was completed with the following conclusions:

- No Aboriginal artefacts or sites were identified in the study area.
- There was very poor surface visibility across the majority of the study area.
- Two landforms - the gentle simple slope and creek terrace were identified as areas of moderate to high archaeological potential.
- The study area has been subjected to moderate to high disturbance from past land use practices. The hill slope was seen as a highly disturbed landform due to the cattle yard construction and associated infrastructure.
- It was determined that areas of the simple slope and creek terrace should be subject to test excavation to better define the nature of any archaeological material present.
- **Error! Reference source not found.** provides a detail of the transects walked over within the study area during the archaeological survey.
- The survey achieved a 0.31% coverage over the study area Table 6-1 shows the details of the archaeological survey conducted in the study area.
- Of the ~8.88ha study area Table 6-1 illustrates that 7000m2 (0.7Ha) was examined and of that ~270m2 was effectively covered. This represents approximately 0.31% of the study area and is considered low effective coverage.

6.2 TEST EXCAVATION RESULTS

The test excavation was conducted over four days between 18 January to 22 January 2021 and 27 January 2021 by Pauline Ramsey (Archaeologist, Austral) with assistance from representatives from the Traditional Owner group Troy Tungai and Craig Tungai from Tungai Tonghi Aboriginal group. Of the 31 test pits excavated, 20 (64.5%) yielded cultural material. Most test pits with artefacts had low density, although this was interspersed with higher densities closer to the creek line in the west. Table 6-2 summarises the distribution of artefacts within the test pits, and further summarises the vertical distributions within the soil profiles.

Table 6-2 Artefact distribution for test pits with artefacts

Pit	Spit 1	Spit 2	Spit 3	Spit 4	Spit 5	Spit 6	Unprov.	Total	Artefacts/ m^2
3		1						**1**	**4**
4B			5			2		**7**	**28**
5	3	5	8	2	1			**19**	**76**
6	1	4						**5**	**20**

© 2022 Austral Archaeology

Pit	Spit 1	Spit 2	Spit 3	Spit 4	Spit 5	Spit 6	Unprov.	Total	Artefacts/ m^2
7		1	4	1				**6**	**24**
***10**	1	6		2	2	1	1	**13**	**38**
***24**		5	1		2			**8**	
***25**			2	1		7		**10**	
***26**		3	1	1		2		**7**	
11		2	1					**3**	**12**
12	1							**1**	**4**
13		2	1			1		**4**	**16**
14			2	1				**3**	**12**
19	1							**1**	**4**
20	1							**1**	**4**
21			2					**2**	**8**
22		5	3					**8**	**32**
27		2	1	1				**4**	**16**
28	1	3	1	3				**8**	**32**
30	2	1						**3**	**12**
Total	**11**	**40**	**32**	**12**	**5**	**13**	**1**	**114**	

* The ‘test pits’ in shaded rows form one contiguous square metre

Across the study area, the top 300mm of soil profile contained approximately 73% of all artefacts, this proportion increasing to 83% of all artefacts in the top 400 millimetres of soil profile. The band between 100 millimetres and 300 millimetres yielded 63% of all artefacts, The deepest artefacts came from between 500 millimetres and 600 millimetres below surface, notably in TP 25, part of the expanded TP10 where three out of four quadrats had artefacts in spit 6 (Table 6-2). White (2021) has recently argued that stratification can survive in open sites and that careful excavation has the potential to separate what might initially appear to be a comingled palimpsest of assemblages. While it is tempting to infer a spike in artefact numbers at depth in TP 10, 24, 25 and 26 may be evidence of such survival of different eras of occupation, it is more likely a continuum of artefact occurrence through the soil profile and the artefacts themselves from that depth are disparate in terms of stone materials. Post deposition disturbance and bioturbation is a more likely explanation for artefacts at depth in this instance.

6.2.1 GENTLE SLOPE SAMPLE AREA 1

Across the study area, the top 300mm of soil profile contained approximately 73% of all artefacts, this proportion increasing to 83% of all artefacts in the top 400 millimetres of soil profile. The band between 100 millimetres and 300 millimetres yielded 63% of all artefacts, The deepest artefacts came from between 500 millimetres and 600 millimetres below surface, notably in TP 25, part of the expanded TP10 where three out of four quadrats had artefacts in spit 6 (**Error! Reference source not found.**). White (2021) has recently argued that stratification can survive in open sites and that careful excavation has the potential to separate what might initially appear to be a comingled palimpsest of assemblages. While it is tempting to infer a spike in artefact numbers at depth in TP 10, 24, 25 and 26 may be evidence of such survival of different eras of occupation, it is more likely a continuum of artefact occurrence through the soil profile and the artefacts themselves from that depth are disparate in terms of stone materials. Post deposition disturbance and bioturbation is a more likely explanation for artefacts at depth in this instance.

© 2022 Austral Archaeology

6.2.2 CREEK TERRACE SAMPLE AREA 2

Test excavation in the creek terrace landform area consisted of 11 test pits evenly placed near the western end of the study area (as identified potential through the predictive model). The maximum depth reached in this landform was about 800 millimetres. This is a flat area of approximately 14,100 square metres (1.41 Ha) adjacent to Bomaderry creek. It has been subject to moderate disturbance due to past land-use but was identified as an area of high archaeological potential based on the predictive model. Test pits excavated in this landform were up to 800 millimetres deep with clay encountered at variable depths from 500 millimetres to 600 millimetres. The transect in this area comprised a primary line of test pits running approximately parallel to the creek (TPs 1-7). TPs 4B, 5, 6 and 7 had artefacts, with a high concentration of 19 artefacts in TP5 (76/m^2). TP30 was excavated 20m east of TP5 to test the extent of the TP5 concentration (Figure 6-1 and Table 6-2).

6.2.3 HILL CREST

The hill crest landform in the far east of the study area was not subject to test excavation. The hill crest is occupied by the livestock sale yards, which include large concrete pads, hardstands, effluent controls and other infrastructure and was consequently highly disturbed.

© 2022 Austral Archaeology

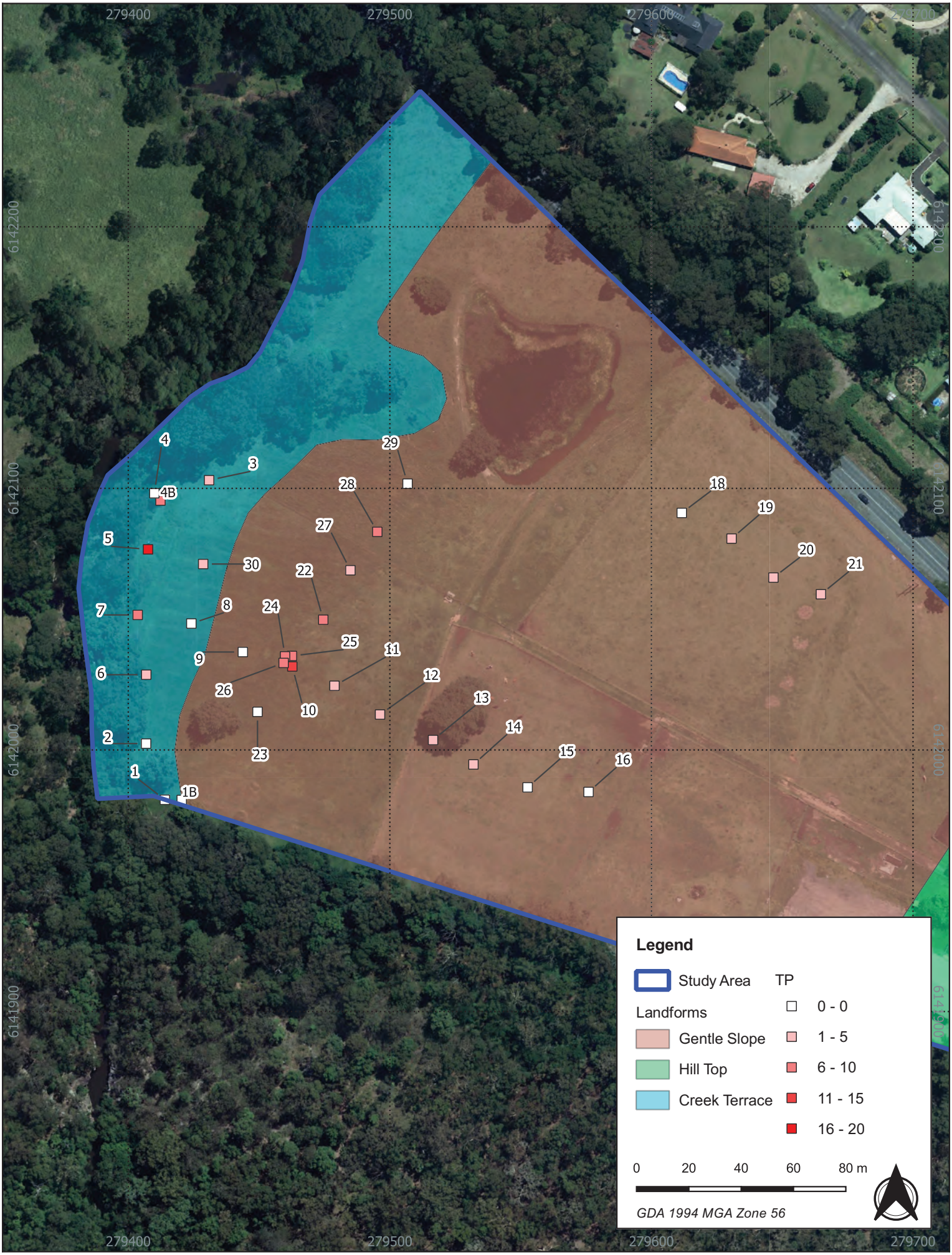


Figure 6-1- Test pits Location

2109 - 25 Moss Vale Road - N27790

Source: NSW LPI Basemap

Drawn by: SS Date: 2021-09-01S

AUSTRAL ARCHAEOLOGY

Figure 6-2 Test pit 21- excavated in gentle slope (landform)-Testing area 1



Figure 6-3 Test pit 10 - transitional stratigraphy from gentle slope to Creek terrace



© 2022 Austral Archaeology

Figure 6-4 Test pit-8, stratigraphy in creek terrace(landform) -Testing area 2



SOILS, DISTURBANCE AND FEATURES

Soil stratigraphy across the study area consisted of three main layers. The topsoils across the study area were generally comprised of a silt layer, transitioning into a silty clay layer that overlayed a solid clay layer. The stratigraphy of the gentle slope region has a very thin humic silt layer followed by a transitional layer at the depth of 200 millimetres which is later followed by yellowish-brown compact clay. Test pits 18, 19, 20 and 21 were excavated on the higher side of the gentle slope landform and exhibit a similar stratigraphy sequence, with the maximum depth reached in Test pit 21 (Figure 6-2).

Test pits 13, 14, 15 which is located in a lower slope transitional area between gentle slope and creek terrace has the addition of reddish-brown sandy loam as the second layer with limited presence of ash and finer roots (Figure 6-5). Test pits excavated in the creek terrace landform showed a silty loam layer with increased charcoal concentration (burnt roots) followed by a compact yellowish hard setting clay layer. Inclusions in this area included cobbles and pebbles (Figure 6-6). The stratigraphy of the study area exhibited the characteristic feature of Shoalhaven and Nowra landscapes.

As a result of the past land use practices like pastoral activities and other land clearing activities, the area is devoid of any native vegetation Such activities impact the artefact distribution patterns across the landform moving it from its primary context to the secondary context.

A summary of soil characteristics across the study area is provided in Table 6-3.

© 2022 Austral Archaeology

Table 6-3 Summary of soil characters within the three landforms

Soil Horizon	Soil Characteristics
A1 Horizon	Depth: 0-200 mm Munsell: 10YR3/3 – 10YR 4/2 PH: 7 Description: yellowish-brown, soft, silty loam humic layer, with A diffuse transition occurring between 100 to 200 mm into Horizon A2.
A2 Horizon	Depth: 150-3000 mm Munsell: 10YR 4/1 - 10YR 6/2 PH: 7 Description: Mid brown to reddish-brown soft, sandy – clay. Clear transition with B-Horizon.
B Horizon	150 - 1000 mm Munsell: 7.5YR 5/4 – 10Y 2/2 PH: 6.9 yellowish brown – reddish brown colour Description: Compact clay.

Figure 6-5 North section of test pit 13 showing reddish-brown sandy clay layer



© 2022 Austral Archaeology

Figure 6-6 North section of Test Pit 7, deposition pattern of the Creek terrace area



© 2022 Austral Archaeology

ARTEFACT ASSEMBLAGE

A total of 114 artefacts were recovered from the test excavation. They were found from two different landforms. In general, a higher number of the artefacts were recovered from the creek terrace landform, particularly from Test Pit 5 (n=18, 72/m^2).

6.3 LITHICS ANALYSIS

This lithic analysis aims to provide details of the stone material identified during the test excavation using standard terminology for artefact analysis taken from Holdaway & Stern (2013) and McCarthy (1976). Detailed artefact analysis entailed recording several characteristics for each artefact. Stone artefact raw materials were examined through a hand lens (x 10 magnification). Each artefact was recorded in database form, suitable for comparative analysis on a local and regional basis. The terminology used in the analysis is defined in Table 6-4.

Table 6-4 Terminology used in the identification of stone tools

Analytical Terms	Definition
Angular fragment / Debitage	A piece of debris exhibiting evidence of knapping but lacking key diagnostic traits (e.g. platform, termination, bulb of percussion)
Backing	An abrupt retouch normally found on one lateral margin of a tool and opposite the working edge.
Bladelet	A small (generally 8-12mm in width) example of a blade; a cutting or scraping tool that is prepared through retouch of an initial flake (blade blank) at least twice as long as it is wide.
Core	A nodule or block of siliceous rock from which sharp-edged slivers of stone are struck (generally with a hammerstone).
Cortex	The weathered outer layer of rock, differing in chemical and optical properties to the unweathered interior.
Distal flake	The termination end of a partial (broken) flake.
Dorsal surface	Outer surface of a flake (former surface of the core) characterised by cortex and/or negative concavities (flake scars) and ridges denoting prior removal of flakes.
Flake	A sliver of stone struck from a core exhibiting characteristic traits of force fracture.
Knapping	The process of fracturing flakes of stone from a core
Lateral margin	Left and right edges of a flake (platform oriented upward when viewing the ventral surface and distal end oriented upward for the dorsal surface).
Platform	Planar surface marking the location from which the flake was struck from the core.
Primary flake	Initial flake struck from a weathered cobble with a dorsal surface covered in cortex and lacking prior flake scars.
Proximal flake	The platform end of a partial (broken) flake.
Retouch	Alteration of the cutting edges of a flake or tool to refine sharpness, shape, angle or strength.
Termination	End of a flake opposite the platform denoting the place the force applied by the hammerstone exited the core.
Tertiary flake	Flake lacking dorsal or platform cortex indicating a high degree of prior reduction of the core from which it was knapped.
Ventral surface	Inner surface of a flake originally attached to a core exhibiting one or more traits of conchoidal fracture including a bulb of percussion, bulbar scar and ripple marks.

© 2022 Austral Archaeology

6.3.1 RESULTS OF THE ANALYSIS

The artefacts recovered during the test excavation program within the study area underwent a detailed lithics analysis by Pauline Ramsey (Archaeologist, Austral) and Paul Howard (Senior Archaeologist, Austral). The distribution of artefacts within the test pits is presented in Figure 6-1 and the types of artefacts found from three artefact scatters are shown in Figure 6-12. Details about artefact analysis are presented in attached as Appendix D.

In terms of stone materials used for artefact manufacture the assemblage showed diversity with nine materials recorded, although of these materials, chert comprised 50% of the assemblage. Silcrete (17.5%) and jasper (14.9%) were the next most abundant materials, with the remaining six materials forming minor components (Table 6-5).

The assemblage exhibits a moderate to high degree of fragmentation, with less than half its number (n=53, 46.5%) being complete diagnostic artefacts. This compromises the validity of an analysis of the assemblage in separate stone material parts and instead requiring an analysis of the overall assemblage as one.

Table 6-5 Artefact frequencies

	Quartz	Chert	Basalt	Chalc'dy	Silcrete	Jasper	Hornfels	Q'zite	Tuff	Total	%
Flake	4	17	3	1	5	7	3		1	**41**	36.0
Bipolar Flake		1			1					**2**	1.8
Proximal Flake Fragment	2	10			3	2				**17**	14.9
Medial Flake Fragment		2			1					**3**	2.6
Distal Flake Fragment	1	8	1		6	1		1		**18**	15.8
Core, single platform		1								**1**	0.9
Core, Multi-platform		2				1				**3**	2.6
Core Fragment	1					1				**2**	1.8
Retouched Flake					2					**2**	1.8
Implement		3		1						**4**	3.5
Flaked Piece	1	13			2	5				**21**	18.4
Totals	**9**	**57**	**4**	**2**	**20**	**17**	**3**	**1**	**1**	**114**	100
Percentage	7.9	50.0	3.5	1.8	17.5	14.9	2.6	0.9	0.9	100	

There is a moderate range of technological categories represented with all of the artefacts being part of the flaked artefact assemblage. An examination of the ratio of flakes to cores is able to be undertaken using partially diagnostic artefacts in the form of proximal and distal flake fragments and also with regard to stone materials by adapting a 'minimum numbers' approach to the frequency of artefact occurrence (Hiscock, 2002). For example, there are six chert distal flake fragments and ten chert proximal flake fragments – this is representative of a total of ten chert flakes in terms of 'minimum numbers'. The fragmented flakes represent 18 flakes in total, which added to the tally of complete flakes (41) is a total of 59 flakes to 3 cores, or approximately 20 flakes per core. This is a high ratio of flakes to cores which may be interpreted as an indicator of cores being moved on from the site rather than being discarded in the study area.

© 2022 Austral Archaeology

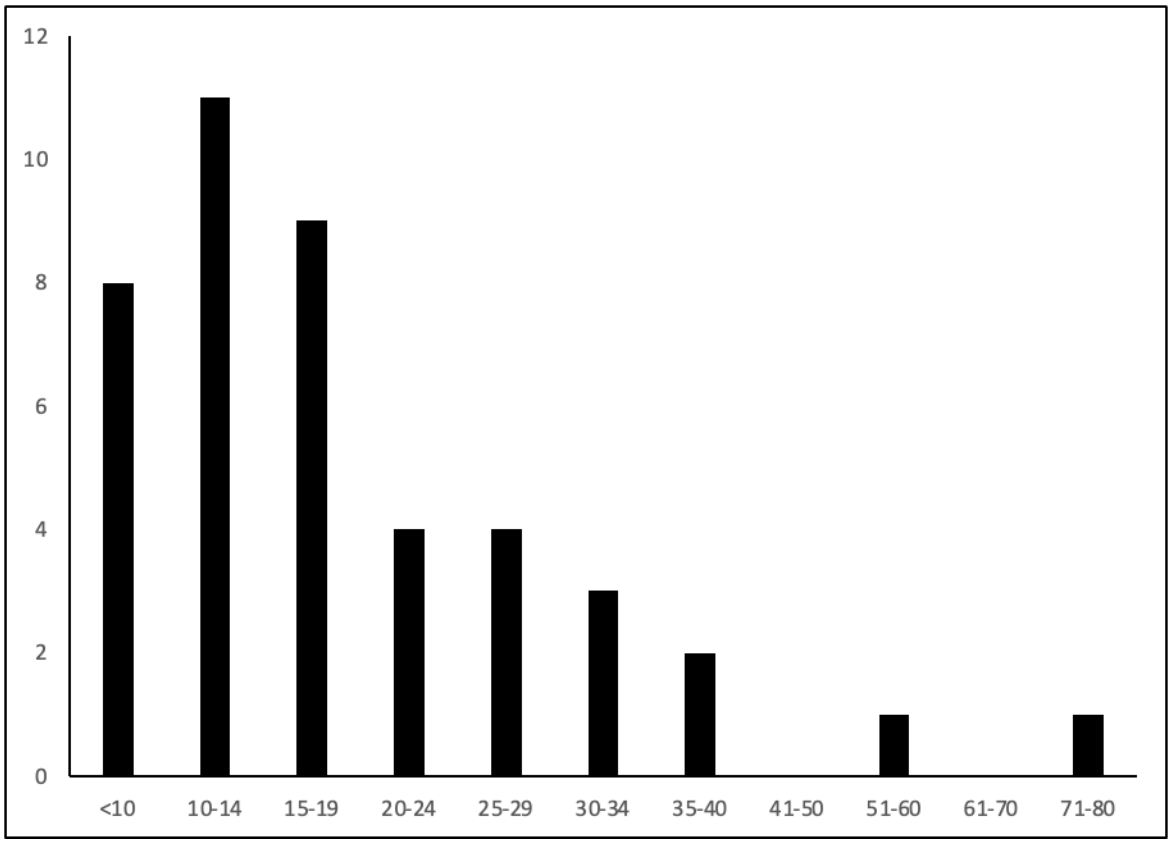


Figure 6-7 Flake Percussion Length (all materials)

Figure 6-7 summarises length classes for complete flakes from the sub surface assemblages. Overall, the flakes were small, with more than half (n=28, 62%) being less than 20mm in percussion length. In addition to being small, the flake assemblage shows a low degree of specialisation in terms of flake platform preparation and blade production. Of the 58 artefacts that exhibit striking platforms (complete flakes and proximal flake fragments), 47 (77%) exhibited flaked platforms and the remainder were crushed and/or sinuous. Facetted platforms were completely absent suggesting a lack of detailed core preparation. Similarly, elongated flakes were rare. Flake elongation is a measure of the extent to which flakes are wide in comparison to their percussion length. It is a feature analysed in order to determine the extent of 'blade' manufacture, and thus arrive at some indication of the economy of flaking trying to be achieved and, further, whether or not people were attempting to produce flakes for further transformation into backed artefacts. For the purposes of stone tool analysis, a blade is defined as a flake the length of which is twice as long (or greater) as its width, and which has approximately parallel lateral margins (Odell 2003: 45, Andrefsky 2007:253). Elongation is generally determined by dividing flake length by width to arrive at an index. In this manner, a flake with an index of 2 is a blade, and an index of 1 is equally as long as wide, and 0.5 is twice as wide as long.

The mean elongation index of all unmodified flakes is 1.29, with the median value at 1.17. Only three flakes exceeded an elongation ratio of 2.0 and an additional four were blade like with elongation ratios in excess of 1.75. There is no particular tendency towards any particular size class being more elongated than others. Figure 6-8 illustrates the overall trend of flakes being slightly longer than wide, with very few being blades or blade like. In this figure, the centre trend line is the point at which flakes are exactly as long as wide, the upper line indicates the point at which they are twice as wide as long, and the lower line twice as long as wide (a blade).

© 2022 Austral Archaeology

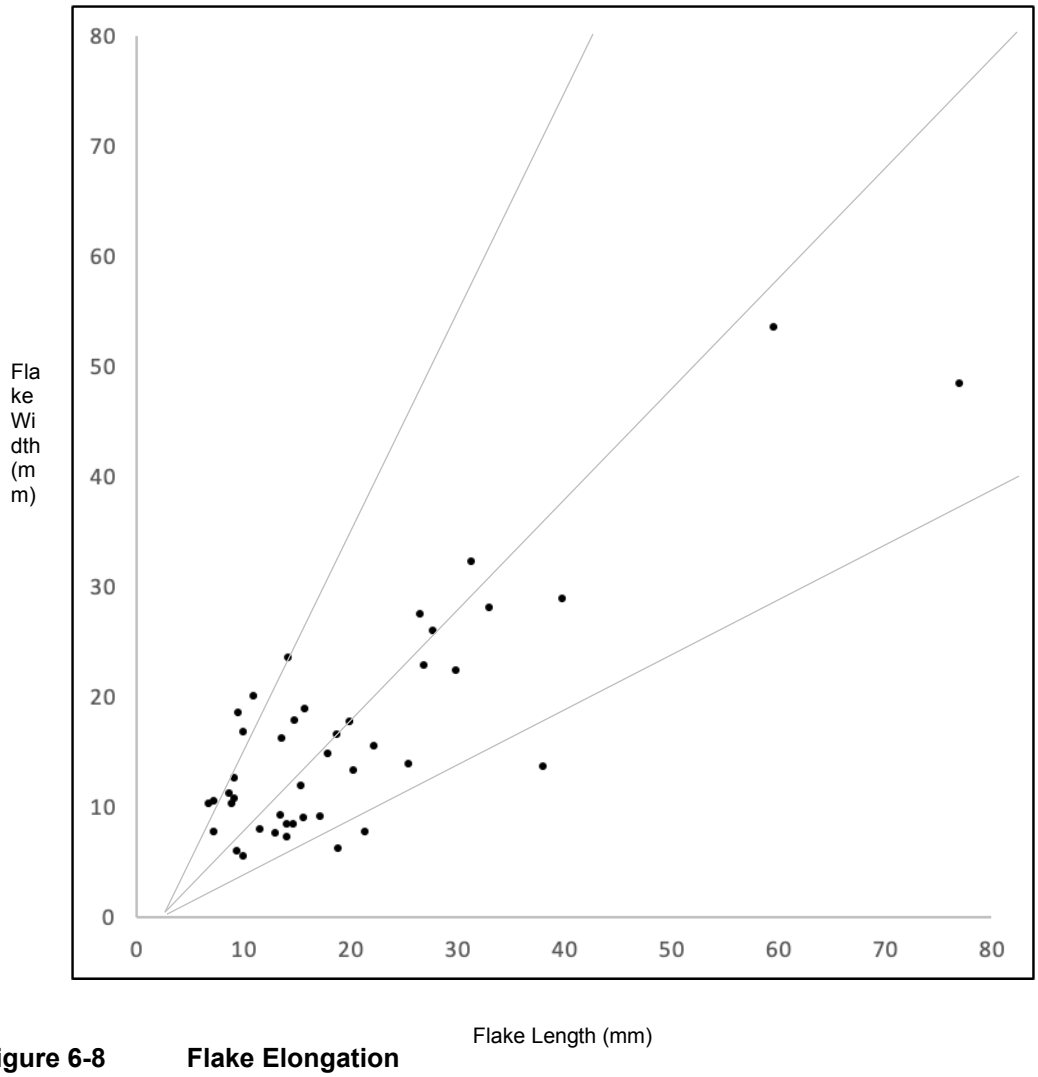


Figure 6-8 Flake Elongation

In summary, flakes were very small, prepared in a simple way for fracture, and were about as long as they were wide with no strong speciality evident. Bipolar flakes were present in small proportion, one of silcrete and one of quartz. With more flakes of these materials being removed with hertzian initiation, this is suggestive that cores of these were small when they entered the study area and were flaked beyond their inertia threshold for handheld flaking and were flaked in a bipolar fashion to extract any last useable flakes.

Only six artefacts (5.3%) exhibited retouch, those made of silcrete, chert and chalcedony.

© 2022 Austral Archaeology

6.4 ABORIGINAL SITE EXTENT

On the basis of the artefact distribution from the test excavation we have identified an artefact scatter of varying density, albeit mainly low. The artefact scatter encompasses the gentle slope and creek flat area, there being a continuum of artefacts across these two landforms. The artefact scatter contained a total of 114 artefacts with a reasonably even distribution across the study area. Several loci of higher density clusters were recorded towards the base of the gentle slope and outer edge of the creek terrace resulting in their registration as three separate listings on AHIMS as summarised in Table 6-6. Overall, the density of the scatter increases with proximity to the creek, the zone of 10-50m appears to be the densest, with material east of this zone considerably sparser on average. It is recognised, however, that the sites all represent the same sub-surface archaeological expression/artefact scatter, albeit spread over two landforms (gentle slope and creek terrace) and associated with several loci of higher density clusters. The extent of the site is shown in Figure 6-14, covering and area of approximately 350 metres x 140 metres.

Table 6-6 Summary of AHIMS listings which form Moss Vale Road Artefact Scatter

Site ID #	Site name	Datum	Zone	Easting	Northing
52-5-0996	Moss vale road artefact scatter 1	GDA	56	279627	6142082
52-5-0997	Moss vale road Artefact scatter 2	GDA	56	279504	6142040
52-5-0998	Moss vale road artefact scatter 3	GDA	56	279432	6142095

Figure 6-9 Landscape view of Moss vale Road Artefact Scatter near the north-eastern corner



© 2022 Austral Archaeology

Figure 6-10 Landscape view of Moss vale Road Artefact Scatter -the gentle slope



Figure 6-11 Landscape view of Moss vale Road Artefact Scatter- Creek Area



Figure 6-12 Selection of artefacts from Moss Vale Road Artefact Scatter



© 2022 Austral Archaeology

Figure 6-13 Selection of artefacts from Moss Vale Road Artefact Scatter



© 2022 Austral Archaeology

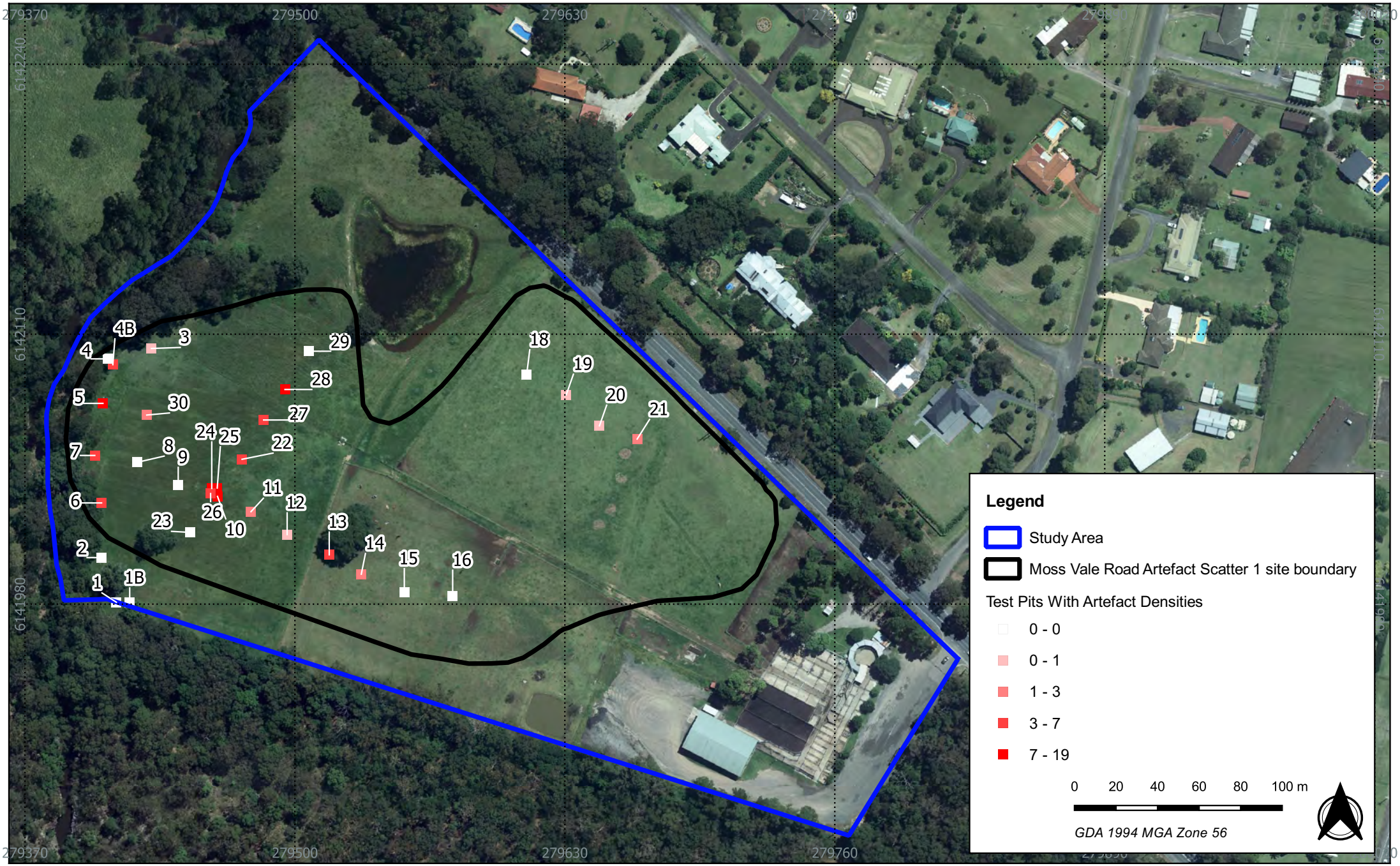


Figure 6.14 AHIMS site extent 52-5-0996 25

- Moss Vale Road, Bomaderry

Source: NSW LPI Aerial

Drawn by: ARH Date: 2022-01-28

AUSTRAL ARCHAEOLOGY

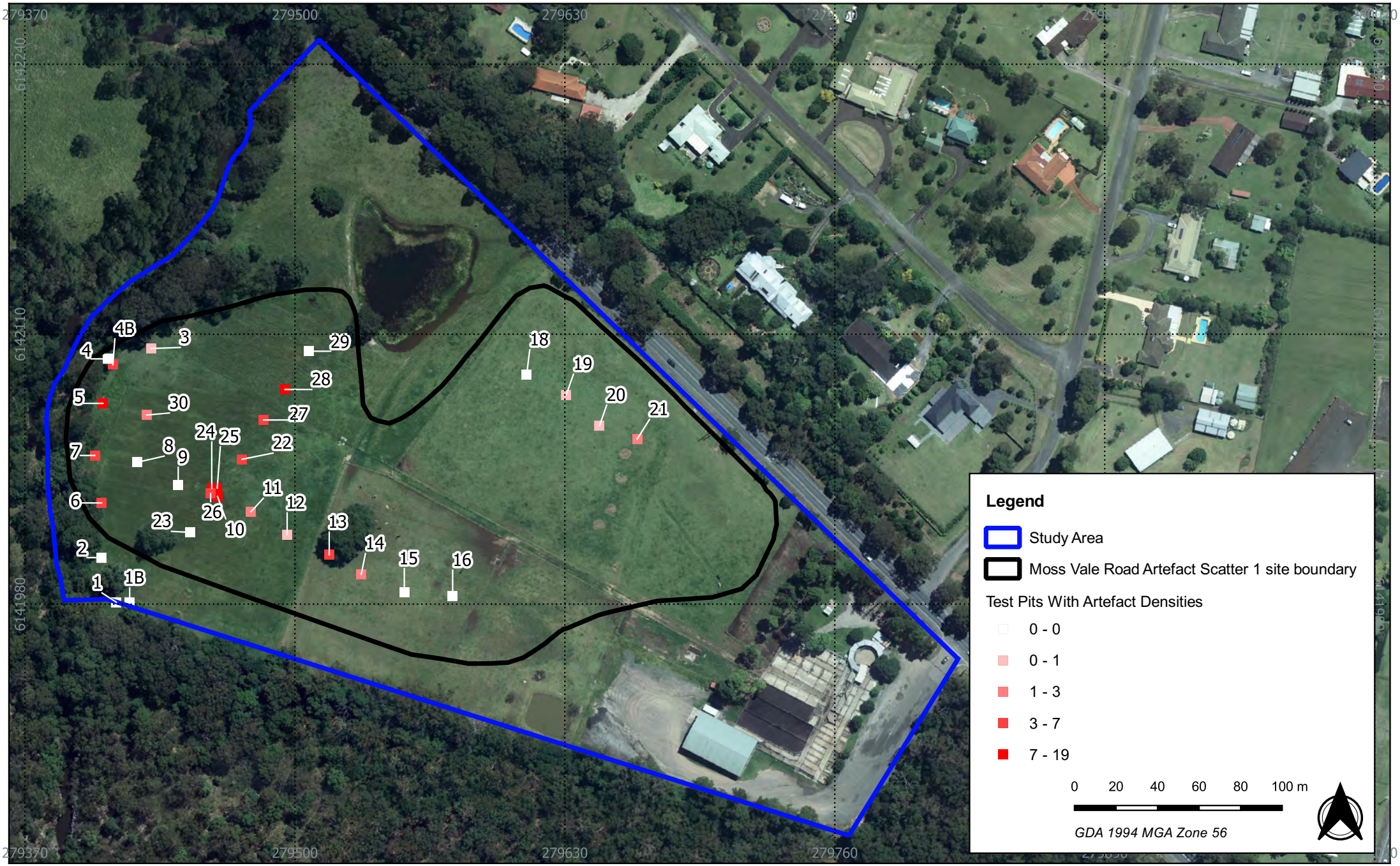


Figure 6.15 AHIMS site extent 52-5-0996

25 - Moss Vale Road, Bomaderry

Source: NSW LPI Aerial

Drawn by: ARH Date: 2022-01-28

AUSTRAL ARCHAEOLOGY

6.5 ANALYSIS AND DISCUSSION

The presence of Aboriginal heritage material in the study area is consistent with the predictive statement made for the study area.

The patterning of the archaeological material suggests that while disturbance has occurred, cultural material retains a degree spatial patterning related to the process of its discard. This patterning is evident at a landform scale, with material becoming denser with proximity to the creek and at a feature scale, with higher density loci interspersed with background scatter.

The limited assemblage available for analysis shows a high degree of fragmentation which may be indicative of post deposition breakage (through damage by cattle or cultivation) but is perhaps more likely able to be interpreted as a result of this area having a paucity of quality stone materials, or materials being carried through the area near the end of their useful sizes. The wide range of materials but limited range of technological categories is worth noting. The assemblage appears to be one of expedience rather than specialisation, with most complete artefacts being small and exhibiting a low level of preparation. In the basis of this limited analysis cores were being removed from the study area and discarded elsewhere, based on the high flake to core ratio. In the aggregate these indicators would suggest the study area was used for transitory occupation as opposed to being a base camp for lengthy periods.

© 2022 Austral Archaeology

7 ASSESSMENT OF HERITAGE SIGNIFICANCE

An assessment of significance seeks to determine and establish the importance or value that a place, site or item may have to the community at large. The concept of cultural significance is intrinsically connected to the physical fabric of the item or place, its location, setting and relationship with other items in its surroundings. The assessment of cultural significance is ideally a holistic approach that draws upon the response these factors evoke from the community.

7.1 BASIS FOR THE ASSESSMENT

The significance values provided in the Australia ICOMOS *Charter for the Conservation of Places of Cultural Significance* (the Burra Charter) are considered to be the best practice heritage management guidelines in Australia (Australia ICOMOS 2013a). The Burra Charter defines cultural significance as:

> *"…aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups." (Australia ICOMOS 2013a, p.2)*

The Burra Charter significance values outlined in Table 7-1; these are frequently adopted by cultural heritage managers and government agencies as a framework for a more holistic assessment of significance.

Table 7-1 Definitions of Burra Charter significance values (Australia ICOMOS 2013b)

Value	Definition
Aesthetic	Refers to the sensory and perceptual experience of a place. That is how a person responds to visual and non-visual aspects such as sounds, smells and other factors having a strong impact on human thoughts, feelings and attitudes. Aesthetic qualities may include the concept of beauty and formal aesthetic ideals. Expressions of aesthetics are culturally influenced.
Historic	Refers to all aspects of history. For example, the history of aesthetics, art and architecture, science, spirituality and society. It therefore often underlies other values. A place may have historic value because it has influenced, or has been influenced by, a historic event, phase, movement or activity, person or group of people. It may be the site of an important event. For any place, the significance will be greater where the evidence of the association or event survives at the place, or where the setting is 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 such change or absence of evidence.
Scientific	Refers to the information content of a place and its ability to reveal more about an aspect of the past through examination or investigation of the place, including the use of archaeological techniques. The relative scientific value of a place is likely to depend on the importance of the information or data involved, on its rarity, quality or representativeness, and its potential to contribute further important information about the place itself or a type or class of place or to address important research questions.
Social	Refers to the associations that a place has for a particular community or cultural group and the social or cultural meanings that it holds for them.

© 2022 Austral Archaeology

Value	Definition
Spiritual	Refers to the intangible values and meanings embodied in or evoked by a place which give it importance in the spiritual identity, or the traditional knowledge, art and practices of a cultural group. Spiritual value may also be reflected in the intensity of aesthetic and emotional responses or community associations and be expressed through cultural practices and related places. The qualities of the place may inspire a strong and/or spontaneous emotional or metaphysical response in people, expanding their understanding of their place, purpose and obligations in the world, particularly in relation to the spiritual realm. The term spiritual value was recognised as a separate value in the Burra Charter, 1999. It is still included in the definition of social value in the Commonwealth and most state jurisdictions. Spiritual values may be interdependent on the social values and physical properties of a place.

In addition to the Burra Charter significance values, other criteria and guidelines have been formulated by other government agencies and bodies in NSW to assess the significance of heritage places in NSW. Of particular relevance to this assessment are the guidelines prepared by the Australian Heritage Council and the Department of the Environment, Water, Heritage and the Arts (DEWHA), and Heritage NSW (Australian Heritage Council & DEWHA 2009, DECCW 2010a, OEH 2011b, NSW Heritage Office 2001).

The Guide (OEH 2011b, p.10) states that the following criteria from the NSW Heritage Office (2001, p.9) should be considered:

- **Social value:** Does the subject area have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons?
- **Historic value:** Is the subject area important to the cultural or natural history of the local area and/or region and/or state?
- **Scientific value:** Does the subject area have potential to yield information that will contribute to an understanding of the cultural or natural history of the local area and/or region and/or state?
- **Aesthetic value:** Is the subject area important in demonstrating aesthetic characteristics in the local area and/or region and/or state?

OEH (2011b, p.10) states that when considering the Burra Charter criteria, a grading system must be employed. Austral will use the following grading system to assess the cultural values of the study area and its constituent features. These are outlined in Table 7-2.

Table 7-2 Gradings used to assess the cultural values of the study area

Grading	Definition
Exceptional	The study area is considered to have rare or outstanding significance values against this criterion. The significance values are likely to be relevant at a state or national level.
High	The study area is considered to possess considerable significant values against this criterion. The significance values are likely to be very important at a local or state level.
Moderate	The study area is considered to have significance values against this criterion; these are likely to have limited heritage value but may contribute to broader significance values at a local or State level.
Little	The study area is considered to have little or no significance values against this criterion.

7.2 ASSESSMENT OF SIGNIFICANCE

The following section addresses the Burra Charter significance values with reference to the overall study area.

7.2.1 AESTHETIC SIGNIFICANCE VALUES

Aesthetic values refer to the sensory, scenic, architectural and creative aspects of the place. These values may be related to the landscape and are often closely associated with social and cultural values.

© 2022 Austral Archaeology

The study area is located in the catchment zone of Shoalhaven River and a fourth-order stream-Bomaderry Creek. A location such as this is generally considered an area of great significance due to the abundance of resources that exist at freshwater in inland environments, namely sources of water and food including freshwater fauna as well as terrestrial fauna seeking water sources.

The study area has landform which are considered as an ideal location for Aboriginal occupation, with a view over Bomaderry Creek towards the west and south. The physical setting of the study area is therefore considered to have moderate aesthetic value, but the archaeology itself does not lend itself to having aesthetic value.

7.2.2 HISTORIC SIGNIFICANCE VALUES

The assessment of historic values refers to associations with particular places associated with Aboriginal history. Historic values may not be limited to physical values but may relate to intangible elements that relate to memories, stories or experiences. There is no known association with any known important Aboriginal person and the study area. The study area does not have 'historical significance' within the meaning of the term for the purposes of significance assessment.

The geographical region of the study area has a long history of occupation by Aboriginal people. The AHIMS search results have shown, about 113 sites within the radius of 5kms of the study area. The nature of these sites varied from Artefact scatters, PADs, Artefact PADs and Open campsites, indicating the significant presence of the traditional communities within the study area.

7.2.3 SCIENTIFIC SIGNIFICANCE VALUES

Scientific significance generally relates to the ability of archaeological objects or sites to answer research questions that are important to the understanding of the past lifeways of Aboriginal people. Australia ICOMOS (2013b, p.5) suggests that to appreciate scientific value, that the following question is asked: "*Would further investigation of the place have the potential to reveal substantial new information and new understandings about people, places, processes or practices which are not available from other sources?*".

In addition to the above criteria, The Guide (OEH 2011b, p.10) also suggests that consideration is given to the Australian Heritage Council and DEWHA (2009) criteria, which are particularly useful when considering scientific potential:

- **Research potential:** does the evidence suggest any potential to contribute to an understanding of the area and/or region and/or state's natural and cultural history?
- **Representativeness:** how much variability (outside and/or inside the subject area) exists, what is already conserved, how much connectivity is there?
- **Rarity:** is the subject area important in demonstrating a distinctive way of life, custom, process, land-use, function or design no longer practised? Is it in danger of being lost or of exceptional interest?
- **Education potential:** does the subject area contain teaching sites or sites that might have teaching potential?

With regard to the study area the following assessment is made:

Research Potential: The archaeology of the study area has moderate research potential. There are isolated loci of moderate to high artefact density that offer the opportunity of large, excavated assemblages for technological analysis. Deeper soil profiles offer potential to separate flaking events although cultivation may have compromised this attribute.

Representativeness: The archaeology of the study area would appear broadly representative of its class of site, and illustrative of general models of site location.

Rarity. The archaeology of the study area is not rare, but an example of a widespread archaeology flanking local creeks.

Education Potential: The archaeology of the site has low education potential in its natural state, as all artefacts are subsurface and not available for instruction.

© 2022 Austral Archaeology

7.2.4 SOCIAL AND SPIRITUAL SIGNIFICANCE VALUES

As social and spiritual significance are interdependent, Austral has undertaken a combined assessment of these values. The Consultation Requirements specify that the social or cultural values of a place can only be identified through consultation with Aboriginal people.

No comments regarding the cultural values of the study area were made by Registered Aboriginal Parties during the consultation process of the project.

7.3 STATEMENT OF SIGNIFICANCE

Statements of significance for identified Aboriginal sites within the study area are presented below. The statements of significance have been formulated using the Burra Charter significance values and relevant NSW guidelines (DECCW 2010a, OEH 2011b, Australia ICOMOS 2013a).

Moss Vale Road Artefact Scatter is of moderate significance. It is an extensive though mostly low-density artefact scatter, which is a common site type in the region. It retains moderate patterning despite agricultural disturbance. It has potential to provide further information to improve our understanding of the Aboriginal use of the type of area through analysis of a larger and statistically valid sample of artefacts and more detailed excavation techniques.

Heritage NSW specifies the importance of considering cultural landscapes when determining and assessing Aboriginal cultural values. The principle behind this is that ‘For Aboriginal people, the significance of individual features is derived from their inter-relatedness within the cultural landscape. This means features cannot be assessed in isolation and any assessment must consider the feature and its associations in a holistic manner” (DECCW 2010f).

Culturally, the location of the study area close to the fresh water sources would have been of high value to the traditional communities and interlinked with surrounding localities as part of a subsistence strategy.

© 2022 Austral Archaeology

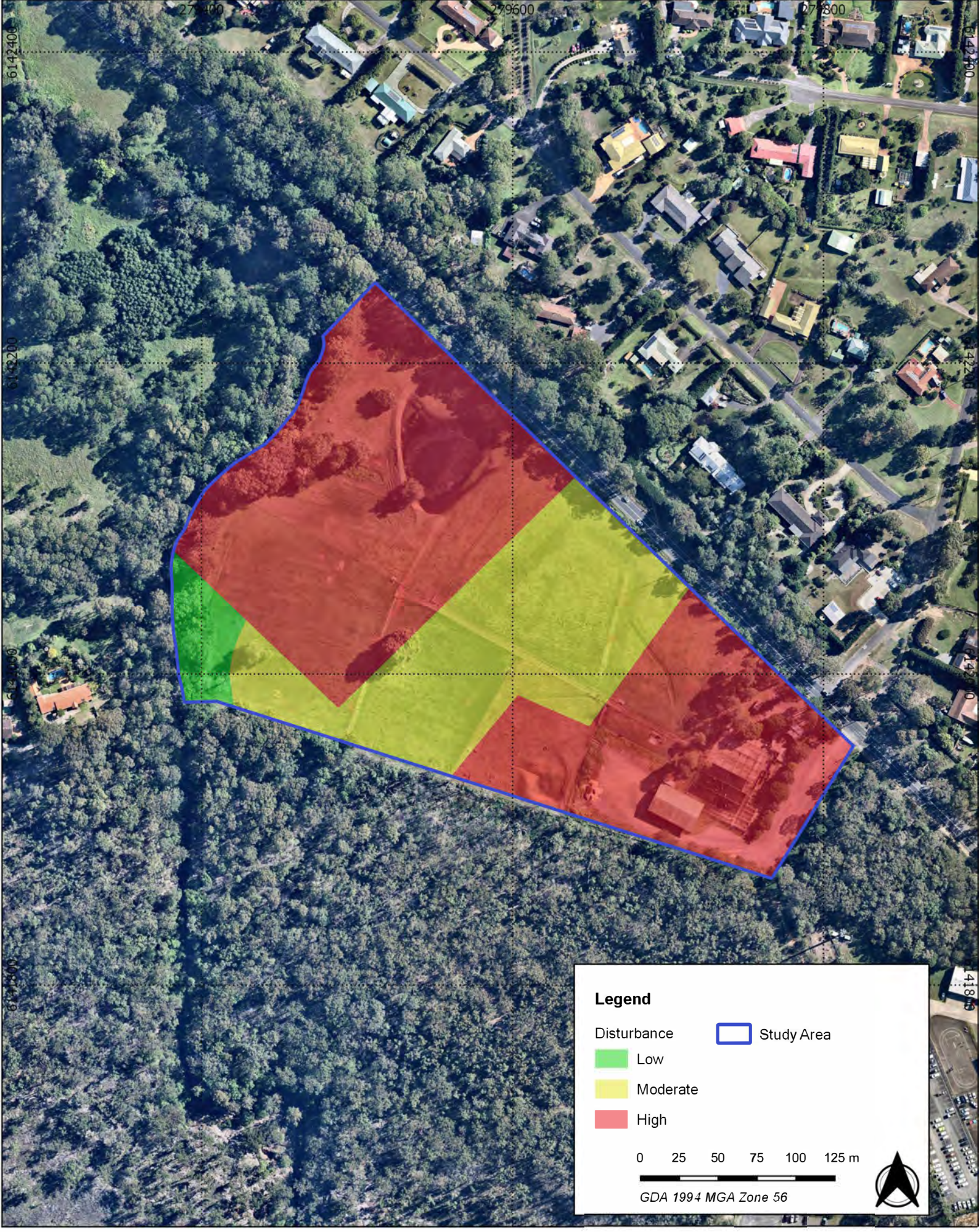


Figure 7-1 - Disturbance Evident within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY

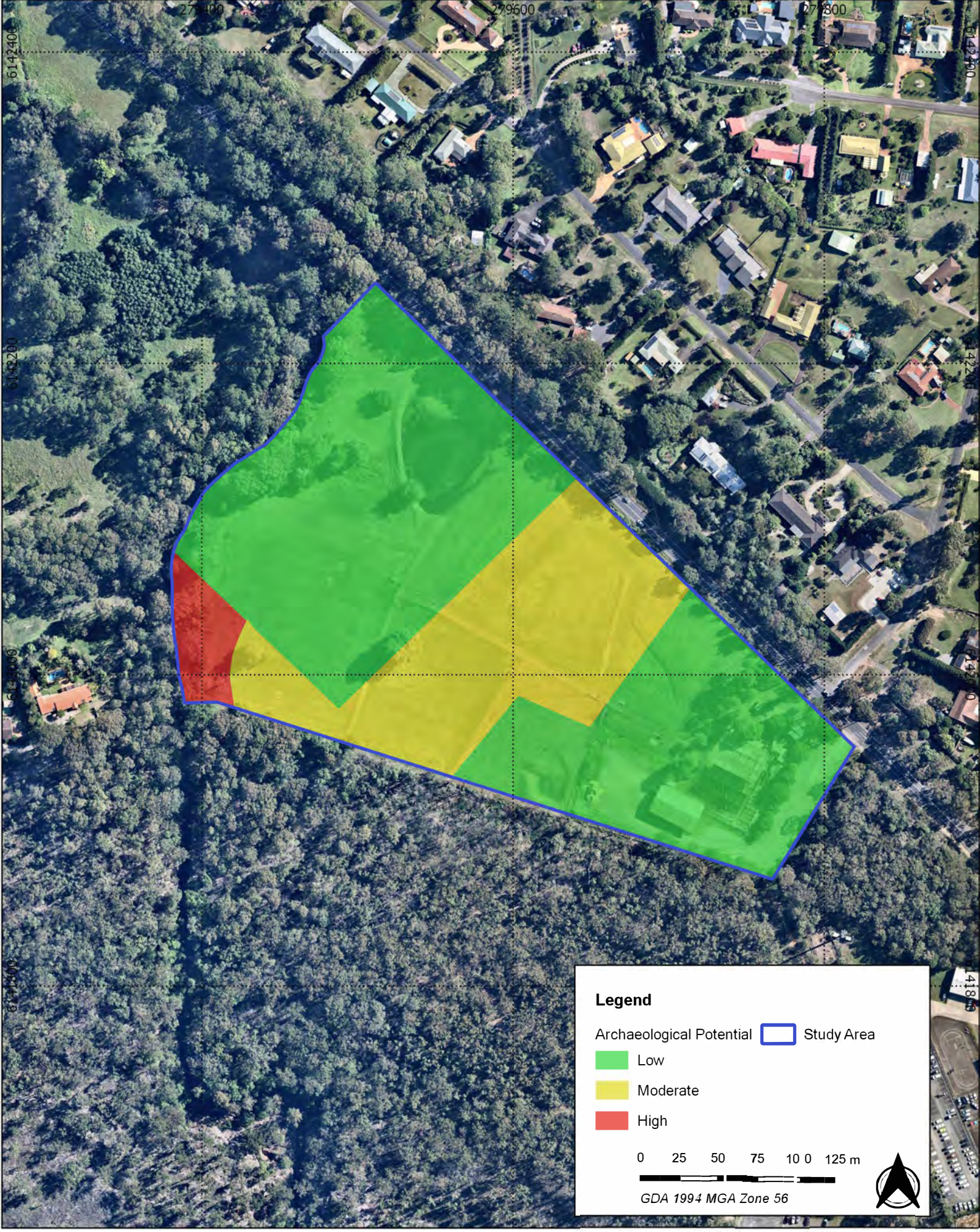


Figure 7-2 - Archaeological Potential Evident within the Study Area

25 Moss Vale Road, Bomaderry, NSW

Aboriginal Technical Report

Source: Nearmap

Drawn by: WA Date: 05/02/2020

AUSTRAL ARCHAEOLOGY

8 IMPACT ASSESSMENT AND MANAGEMENT RECOMMENDATIONS

8.1 PROPOSED ACTIVITY

The proposed activity at this stage consists of the subdivision and development of the study area into residential lots with associated access roads.

It is understood that these proposed works will involve:

- large scale ground works including extensive earth excavation and levelling;
- The installation of infrastructure, such as houses, roads and services; and the lawn bowls complex,
- The clearance of existing vegetation within areas marked for development.

8.2 ASSESSING HARM

This section outlines the assessment process for addressing potential harm to Aboriginal objects and/or places within the study area, as outlined by Heritage NSW (OEH 2011b, p.12).

8.2.1 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

An objective of the NPW Act, under Section 2A(1)(b)(i) is to conserve "*places, objects and features of significance to Aboriginal people*" through applying the principles of ecologically sustainable development (ESD) (Section 2A(2)). ESD is defined in Section 6(2) of the *Protection of the Environment Administration Act 1991* (NSW) as "…*the effective integration of social, economic and environmental considerations in decision-making processes".* ESD can be achieved with regards to Aboriginal cultural heritage, by applying principle of inter-generational equity, and the precautionary principle to the nature of the proposed activity, with the aim of achieving beneficial outcomes for both the development, and Aboriginal cultural heritage.

INTERGENERATIONAL EQUITY

The principle of intergenerational equity is where the present generation ensure the health, diversity and productivity of the environment for the benefit of future generations. The Department of Environment and Climate Change (DECC), now Heritage NSW, states that in terms of Aboriginal cultural heritage "*intergenerational equity can be considered in terms of the cumulative impacts to Aboriginal objects and places in a region. If few Aboriginal objects and places remain in a region (for example, because of impacts under previous AHIPs), fewer opportunities remain for future generations of Aboriginal people to enjoy the cultural benefits of those Aboriginal objects and places.*" (DECC 2009, p.26).

The assessment of intergenerational equity and understanding of cumulative impacts should consider information about the integrity, rarity or representativeness of the Aboriginal objects and/or places that may be harmed and how they illustrate the occupation and use of the land by Aboriginal people across the locality (DECC 2009, p.26).

Where there is uncertainty over whether the principle of intergenerational equity can be followed, the precautionary principle should be applied.

PRECAUTIONARY PRINCIPLE

Heritage NSW defines the Precautionary Principle as "*if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent environmental degradation*" (DECC 2009, p.26).

The application of the precautionary principle should be guided through:

- A careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment.
- An assessment of the risk—weighted consequences of various options.

© 2022 Austral Archaeology

DECC (2009, p.26) states that the precautionary principle is relevant to the consideration of potential impacts to Aboriginal cultural heritage, where:

- The proposal involves a risk of serious or irreversible damage to Aboriginal objects and/or places or to the value of those objects and/or places.
- There is uncertainty about the Aboriginal cultural heritage values, scientific, or archaeological values, including in relation to the integrity, rarity or representativeness of the Aboriginal objects or places proposed to be impacted.

Where either of the above is likely, a precautionary approach should be taken, and all effective measures implemented to prevent or reduce harm to Aboriginal cultural heritage values.

8.2.2 TYPES OF HARM

When considering the nature of harm to Aboriginal objects and/or places, it is necessary to quantify direct and indirect harm. The types of harm, as defined in the Guide (OEH 2011b, p.12), and are summarised in Table 8-1. These definitions will be used to quantify the nature of harm to identified Aboriginal objects and/or places that have been identified as part of this assessment. The Code states that the degree of harm can be either total or partial (DECCW 2010c, p.21).

Table 8-1 Definition of types of harm

Type of harm	Definition
Direct harm	May occur as the result of any activity which disturbs the ground including, but not limited to, site preparation activities, installation of services and infrastructure, roadworks, excavating detention ponds and other drainage or flood mitigation measures, and changes in water flows affecting the value of a cultural site.
Indirect harm	May affect sites or features located immediately beyond, or within, the area of the proposed activity. Examples of indirect impacts include, but are not limited to, increased impact on art in a shelter site from increased visitation, destruction from increased erosion and changes in access to wild food resources.

8.3 IMPACT ASSESSMENT

This ACHA has included a programme of investigations that have characterised the nature, extent and significance of Aboriginal sites within the study area.

Figure 8-1 shows the proposed development footprint in relation to the known Aboriginal heritage sites as identified during this assessment. As a result of the proposed activity, the location of the registered sites will be directly impacted. The associated construction works with the proposed activity have the capacity to remove the Aboriginal artefacts and displace them from the original location impacting the scientific and research value. The proposed activity will directly impact the aesthetic value changing the aesthetic appeal of the study area.

The proposed development will have a high impact on the majority of the study area and thus location of sites Moss Vale Road Artefact Scatter 1 (AHIMS # 52-5-0996), Moss Vale Road Artefact Scatter 2 (AHIMS # 52-5-0997) and Moss Vale Road Artefact Scatter 3 (AHIMS # 52-5-0998). The western most extent of the proposed development is a roughly north-south oriented access road that will, approximately, traverse the transect of TPs 23, 10/24/25/26, 22, 27 and 28. Areas to the west of this will form a public reserve and as a consequence will be protected from development. This includes the highest density artefact concentration in Pit 5, but also moderate to high-density TPs 4B and 7. East of the access road will be subdivision components that will affect the majority of the site area, though in all likelihood areas of low density.

As illustrated in Figure 8-1, an area has been proposed as a conservation area / Riparian zone in response to biodiversity/riparian conservation requirements for the broader project. A positive outcome of this conservation area is that any Aboriginal objects found within that area (i.e., the distance of 100m from the western boundary of the study area and consisting of the larger cluster of the subsurface artefacts associated with site AHIMS ID 52-5-0098) would not be subjected to any harm under the proposed development as it is located within the conservation and Riparian zone.

© 2022 Austral Archaeology

Overall, Moss Vale Road Artefact Scatter1 (AHIMS # 52-5-0996), Moss Vale Road Artefact Scatter 2 (AHIMS # 52-5-0997) and Moss Vale Road Artefact Scatter 3 (AHIMS # 52-5-0998) will sufferer partial harm and a partial loss of value.

8.4 RECOMMENDATIONS

The following recommendations are derived from the findings described in this ACHA. The recommendations have been developed after considering the archaeological context, environmental information, consultation with the local Aboriginal community, and the findings of the test excavation and the predicted impact of the planning proposal on archaeological resources.

It is recommended that:

1. Before any works occur, the proponent is to apply to Heritage NSW for an Aboriginal Heritage Impact Permit (AHIP) to partially harm site Moss Vale Road Artefact Scatter 1 (AHIMS # 52-5-0996), please note the boundaries of this site have expanded to incorporate the registered sites AHIMS # 52-5-0997 and AHIMS # 52-5-0996. This site is protected under Section 90 of the *NSW National Parks and Wildlife Act 1974* (NPW Act). The proponent must not undertake any development work on the site prior to receiving an AHIP.
2. A condition of the AHIP should be the salvage of a larger sample of artefacts from TPs 10, 13, 21, 22, 27 and 28. This salvage should be undertaken according to the salvage method provided in Appendix 6 of this report.
3. Prior to the commencement of any ground works related to the activity, all contractors and/or employees of contractors involved in ground disturbance works must attend a cultural heritage induction prepared and presented by a qualified archaeologist in cooperation with local Aboriginal people.
4. The proponent must prepare an Ad Hoc finds protocol to guide actions subsequent to finding suspected Aboriginal objects or remains. The protocol should be submitted as part of the AHIP application
5. Aboriginal ancestral remains may be found in a variety of landscapes in NSW. If any suspected human remains are discovered during any activity, you must:

- immediately cease all work at that location and not further move or disturb the remains
- notify the NSW Police and Heritage NSW's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location
- not recommence work at that location unless authorised in writing by Heritage NSW.

6. All Aboriginal objects collected during the archaeological testing will be reburied onsite at the nominated location (Appendix E).
7. It is recommended that the Proponent continues to inform the Aboriginal stakeholders about the management of Aboriginal cultural heritage within the study area following the completion of the project. The consultation outlined as part of this ACHA is valid for 6 months and must be maintained by the proponent for it to remain continuous. If a gap of more than 6 months occurs, then the consultation will not be suitable to support an AHIP for the project.
8. A copy of this report should be forwarded to all Aboriginal stakeholder groups who have registered an interest in the project.

© 2022 Austral Archaeology

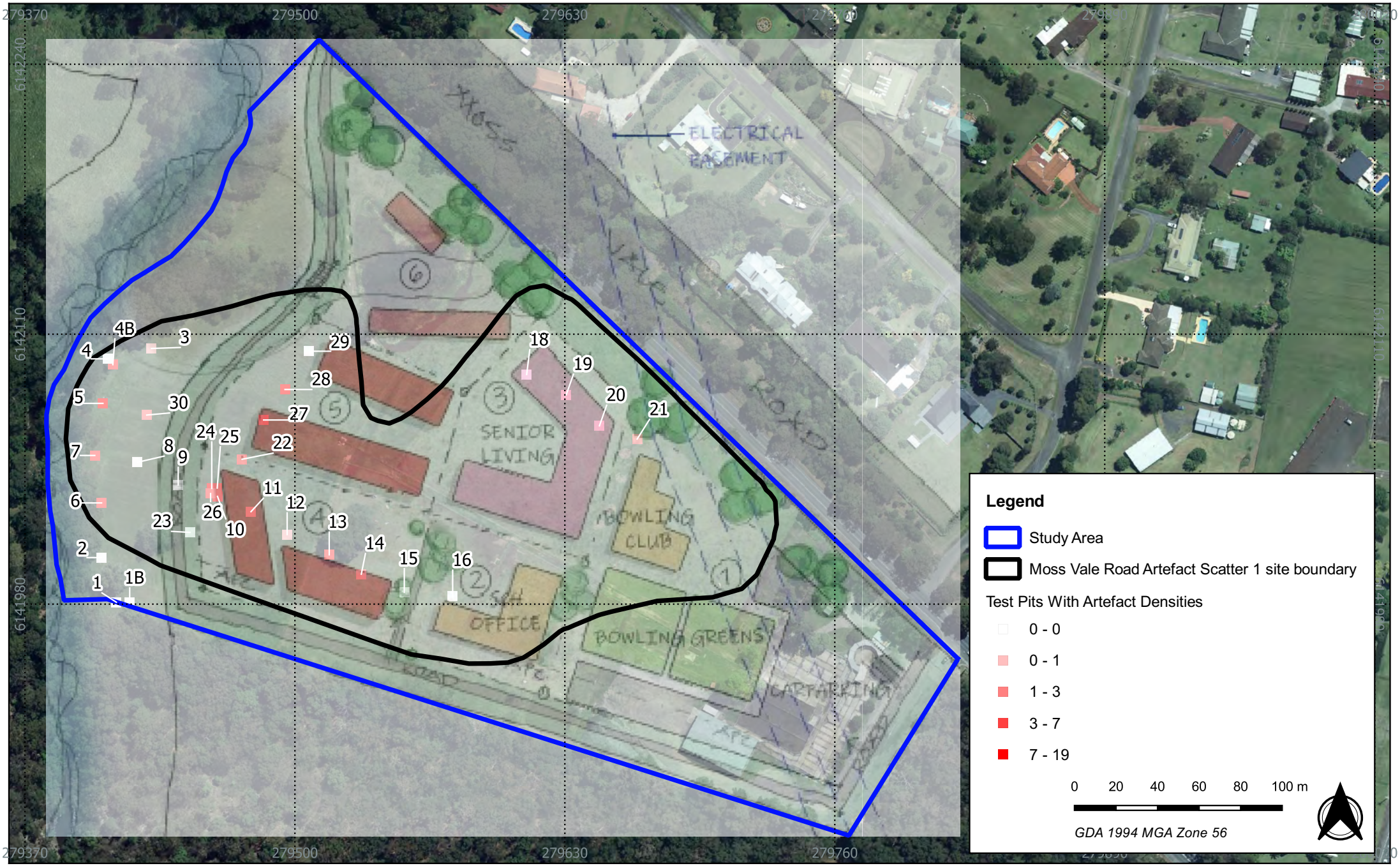


Figure 8.1 AHIMS site extent 52-5-0996 with Proposed development

25 - Moss Vale Road, Bomaderry

Source: NSW LPI Aerial

Drawn by: ARH Date: 2022-01-28

AUSTRAL ARCHAEOLOGY

REFERENCES

AMBS 2006, 'Aboriginal Heritage Management Plan: West Dapto Release Area Final Report.'

Artefact Heritage 2015, *West Nowra Resource Recovery Park Aboriginal Archaeological Survey Report*.

Artefact Heritage 2018, *Nowra Bridge Project*, Pyrmont, NSW.

Attenbrow, V 2003, *Sydney's Aboriginal Past: Investigating the Archaeological and Historical Records*, University of New South Wales Press Ltd, Australia.

Austral Archaeology Pty Ltd 2019, *371 Illaroo Road, Bangalee, NSW: Aboriginal Cultural Heritage Assessment*.

Biosis Pty Ltd 2010, *Tallawarra Lands: Part 3A Concept Plan Aboriginal Archaeological Assessment*.

Biosis Pty Ltd 2017, *Meroo Meadow Aboriginal Cultural Heritage Assessment*.

Biosis Pty Ltd 2018, 'Taylors Lane, Lot 116 DP 3060 Aboriginal Cultural Heritage Due Diligence Assessment'.

Biosis Pty Ltd 2019, *Taylors Lane (Lot 1 DP949932) Archaeological Report*, Prepared for Cardno.

BMT WBM Pty Ltd 2010, *Bomaderry Creek flood study*, Report for Shoalhaven City Council.

Boot, P 2002, *Didthul, Gulaga and Wadbilliga: An archaeological study of the Aboriginals of the New South Wales South Coast hinterland.* Unpublished PhD thesis, Australian National University, Canberra.

Cardno 2016, *Bomaderry floodplain risk management study*, Report prepared for Shoalhaven City Council.

Carter, P et al. 2013, 'Shoalhaven area: coastal quaternary geology 1:100 000 and 1:25 000', *New South Wales coastal quaternary geology map series*.

Clarke, E & Kuskie, P 2006, *Aboriginal Heritage and Cultural Mapping Project: Lower Shoalhaven River Valley – Stage 4A: Archaeological Predictive Modelling and Aboriginal Community Consultation*, Unpublished report to the Department of Environment and Conservation (NSW) and NSW National Parks and Wildlife Services South Coast Region.

Construction Sciences 2020, *Stage 1 Preliminary Site Investigation: 25 Moss Vale Road, Bomaderry, NSW*, Prepared for Southern Cross Community Housing Ltd c/- Allen Price & Scarratts Pty Ltd, 25 Moss Vale Road, Bomaderry, NSW.

Daily Telegraph 1896, 'THE QUEENSLAND TICK PLAGUE.', *Daily Telegraph (Sydney, NSW: 1883 - 1930)*, p. 5.

Dallas, M 1995, *Wollongong City Aboriginal Heritage Planning STUDY*.

DECCW 2010a, 'Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales'.

DECCW 2010b, 'Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010'.

© 2022 Austral Archaeology

Department of Environment and Conservation 2005a, *A History of Aboriginal People of the Illawarra 1770 to 1970*, Department of Environment and Conservation, Sydney.

Department of Environment and Conservation 2005b, *Early Contact Map*, Department of Environment and Conservation, Sydney.

Dibden, j 2018, *Aboriginal Archaeological Study for Moss Vale Road North (MVRN) Urban Release Area*.

Foley, R 1981, 'A Model of Regional Archaeological Structure', *Proceedings of the Prehistoric Society*, vol. 47, pp. 1–17.

Hazelton, PA, Conservation, NSWD of, & Management, L 1992, *Soil landscapes of the Kiama 1:100 000 sheet*, Sydney: Dept. of Conservation and Land Management, viewed 5 December 2019, <https://trove.nla.gov.au/version/24715460>.

Kass, T 2010, *A Thematic History of the City of Wollongong*, Wollongong City Council, Wollongong.

Kayandel Archaeological Services 2011, *Shoalhaven Starches Gas Pipeline Scheme*.

Kelleher Nightingale Consulting Pty Ltd 2010, *North Nowra Link Road*.

Kohen, J 1997, *'Archaeological Survey on the Illawarra Escarpment near Dapto, NSW', Report to Avon Colliery*.

Kuskie, P 2008, *An Aboriginal Heritage Impact Assessment of a Proposed Ethanol Plant Upgrade at Shoalhaven Starched, Bomaderry, South Coast of New South Wales*, Manildra Group.

Lampert, R 1971, 'Coastal Aborigines of Southeastern Australia', in, *Prehistory of Australia*, Smithsonian University Press.

Lampert, RJ & Steele, DH 1993, 'Archaeological studies at Bomaderry Creek, New South Wales', in J Specht (ed.), *Commemorative Papers (Archaeology, Anthropology, Rock Art)*, The Australian Museum, Sydney, N.S.W., pp.55–75.

Lawrence, R 1969, *Aboriginal Habitat and Economy*, Australian National University, Canberra.

Lindsay, B 1994, *Early Land Settlement in Illawarra*, Illawarra Historical Publications, Wollongong.

McDonald., J 1997a, *'Interim heritage management report: ADI Site, St Marys; Volume 1: Text', Report to Land Lease – ADI Joint Venture in response to the Section 22 Committee Interim Report.*

McDonald., J 1997b, *'Interim heritage management report: ADI Site, St Marys; Test Excavation Report', Report to Lend Lease – ADI Joint Venture in response to the Section 22 Committee Interim Report*.

McDonald., J 1999, *'Test Excavation of PAD5 (RH/SP9) and PAD31 (RH/cc2) for the Rouse Hill (Stage 2) Infrastructure Project at Rouse Hill and Kellyville, NSW', Report to RHIC*.

McDonald., J 2000, *'Archaeological Survey for Aboriginal Sites: Proposed Light Industrial Subdivision "Austral Site" – Mamre Road, Erskine Park, NSW', Report for Austral Brick Pty Ltd*.

McElroy, CT et al. 1969, 'Sydney Basin: Shoalhaven Group', *Journal of the Geological Society of Australia*, vol. 16, pp. 357–366.

© 2022 Austral Archaeology

Navin, K 1987, *What Hasn't Happened to Lake Illawarra.* Unpublished BA Honours, ANU, Canberra ACT.

Navin, K 1991, *Archaeological Survey of North Nowra-Bomaderry Creek Link Road (Option 2) and Three Alignment Options*, Report to Mitchell McCotter & Associated Pty Ltd.

Navin Officer 2000, 'Shellharbour City Council Area Aboriginal Heritage Study. Report to Shellharbour City Council.'

Navin Officer Heritage Consultants 2006, *Gerroa Sand Mine Extension: Archaeological Subsurface Testing Program*, Report for Perram and Partners on behalf of Cleary Bros (Bombo).

Navin Officer Heritage Consultants 2007, *Gerringong to Bomaderry Princes Highway upgrade.*, Report for the Roads and Maritime Services NSW.

Navin Officer Heritage Consultants 2010, *Gerringong upgrade Princes Highway: Review of Environmental Factors Appendix G – Cultural Heritage Assessment*, Report for The Roads and Traffic Authority NSW.

Navin Officer Heritage Consultants Pty Ltd 2012, *Princes Highway Gerringong Upgrade Additional Areas 1-19 and 49: Aboriginal Cultural Heritage Assessment.*, Report for the Department of Transport Roads & Maritime Services NSW.

NPWS 1997, 'Aboriginal Cultural Heritage: Standards and Guidelines Kit'.

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

Organ, M & Speechley, C 1997, *Illawarra Aborigines - An Introductory History*, University of Wollongong, Wollongong, NSW.

Peter Freeman Pty Ltd & JRC Planning Services 2003, *Shoalhaven City Council Heritage Study 1995-1998*.

Poiner, G 1971, *The Process of the Year* Unpublished BA Honours, University of Sydney.

Poiner, G 1976, 'The process of the year among Aborigines of the central and south coast of New South Wales', viewed 17 March 2020, <https://trove.nla.gov.au/version/210720538>.

Sefton, C 1981, *Aboriginal Cultural Resources Study Illawarra Region*, Report for National Parks and Wildlife Services.

Shoalhaven Telegraph 1923, 'MR. THOMAS SHEPHERD.', *Shoalhaven Telegraph (NSW: 1881 - 1937)*, p. 3.

Silcox, R 1990, *Archaeological assessment of Aboriginal and Historic sites on the proposed North Kiama by pass between Dunmore and Bombo, Kiama, NSW*, Report for Connell Wagner Pty Ltd.

Stewart, K & Percival, B 1997, *Bush Foods of New South Wales*, Royal Botanic Gardens, Sydney, N.S.W.

Tindale, N 1974, *Aboriginal Tribes of Australia*, Australian National University, Canberra.

Wesson, S n.d., *Murni Dhungang Jirrar - Living in the Illawarra*.

© 2022 Austral Archaeology

APPENDICES

APPENDIX A: AHIMS SEARCH DATA

A1: AHIMS SEARCH RESULTS – 5 FEBRUARY 2020

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 2003

Client Service ID : 481699

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
52-5-0302	Tapitallee Ck 1;	AGD	56	278000	6141630	Open site	Valid	Artefact : 4	Open Camp Site	102506
	Contact	**Recorders**	Mr.Doug Williams,Mr.David Johnston,Mr.Sam Wickman,Mr.Matthew Barber					**Permits**		
52-5-0931	Tapitallee Creek 4	GDA	56	278174	6142011	Open site	Valid	Artefact : 1		
	Contact	**Recorders**	Doctor.Sue Feary					**Permits**	4520	
52-5-0933	PAELEOCHANNEL 1	GDA	56	278645	6142413	Open site	Valid	Artefact : 1		
	Contact	**Recorders**	Doctor.Sue Feary					**Permits**	4520	
52-2-1797	West Cambewarra Rd.;Bomaderry Creek;	AGD	56	279300	6141700	Open site	Valid	Grinding Groove : -	Axe Grinding Groove	98511,103143
	Contact	**Recorders**	T Bartlett					**Permits**		
52-5-0542	BCRP 006 Pipeline Shelter	AGD	56	279545	6141313	Closed site	Valid	Artefact : 1		102506
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd					**Permits**		
52-5-0544	BCRP 012 Pitt Street Narang	AGD	56	278907	6141032	Open site	Valid	Artefact : 1		102506
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd					**Permits**		
52-5-0557	BCRP 026 Rock Fall Canyon Shelter	AGD	56	281896	6140560	Closed site	Valid	Artefact : 1		102506
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd					**Permits**		
52-5-0753	G2B A61	GDA	56	280248	6142928	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		103718
	Contact	**Recorders**	Mr.Adrian Cressey					**Permits**	3791	
52-5-0876	Nowra Bridge 8	GDA	56	280531	6139772	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Artefact - Cultural Heritage Management ,Mr.ryan taddeucci					**Permits**	4479	
52-5-0852	Nowra Bridge 1	GDA	56	280851	6138971	Open site	Valid	Artefact : -		103860
	Contact	**Recorders**	Artefact - Cultural Heritage Management ,Artefact - Cultural Heritage Management					**Permits**	4479	
52-5-0853	Nowra Bridge 2	GDA	56	280569	6139589	Open site	Valid	Artefact : -		103860,103864,103865
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd,Kelleher Nightingale Consulting Pty Ltd,Art					**Permits**	4246,4479	
52-5-0856	Nowra Bridge 5	GDA	56	280531	6139565	Open site	Valid	Artefact : -, Habitation Structure : -, Grinding Groove : -		103860
	Contact	**Recorders**	Artefact - Cultural Heritage Management ,Artefact - Cultural Heritage Management					**Permits**		
52-5-0539	BCRP 002 The black caves	AGD	56	279701	6141045	Open site	Valid	Artefact : 1		102506
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd					**Permits**		
52-5-0545	BCRP 013 West Cambewarra	AGD	56	279206	6141669	Open site	Valid	Artefact : 1		102506
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd					**Permits**		
52-5-0553	BCRP 022-30 Metres West of Shelter Cave	AGD	56	279917	6140870	Closed site	Valid	Artefact : 1		102506
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd					**Permits**		

Report generated by AHIMS Web Service on 05/02/2020 for Nicole Monk for the following area at Datum :GDA, Zone : 56, Eastings : 275528 - 282951, Northings : 6138576 - 6145416 with a Buffer of 50 meters. Additional Info : Aboriginal Heritage Assessment. Number of Aboriginal sites and Aboriginal objects found is 113

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

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
52-5-0555	BCRP 024 One Silcrete Flake	AGD	56	279675	6141006	Open site	Valid	Artefact : 1		102506
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd					**Permits**		
52-5-0749	G2B A57	GDA	56	281151	6144307	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	**Recorders**	Mr.Adrian Cressey					**Permits**	3791	
52-5-0750	G2B A58	GDA	56	280949	6143989	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	**Recorders**	Mr.Adrian Cressey					**Permits**	3791	
52-5-0709	PASA 46	GDA	56	281969	6145455	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		103068
	Contact	**Recorders**	Mr.Adrian Cressey,Mr.Adrian Cressey					**Permits**	3791	
52-5-0915	104 Taylors Lane AFT1	GDA	56	278029	6143197	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
52-5-0928	Jamieson Road 4	GDA	56	279616	6140363	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					**Permits**		
52-5-0306	EGP 3-27;Humbug Reach shoalhaven;Eastern Gas Pipline;	AGD	56	276620	6138360	Open site	Valid	Artefact : -	Open Camp Site	102506
	Contact	**Recorders**	Kerry Navin,Mr.Kelvin Officer					**Permits**		
52-5-0926	Jamieson Road PAD1	GDA	56	279742	6140455	Closed site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact	**Recorders**	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					**Permits**		
52-5-0287	Abernethys Creek 1;	AGD	56	280360	6142800	Open site	Valid	Artefact : -	Open Camp Site	102301,102506
	Contact	**Recorders**	Mr.Kelvin Officer					**Permits**	3791	
52-5-0422	NO.LC2	AGD	56	279970	6143690	Open site	Valid	Artefact : 7		102301,102506
	Contact	**Recorders**	Mr.Sam Wickman					**Permits**		
52-5-0453	BC1/E	AGD	56	279930	6141030	Closed site	Valid	Artefact : 6		102506,103143
	Contact T Russell	**Recorders**	Mr.Edward Clarke					**Permits**		
52-5-0685	PASA 3 (Berry - Bomaderry)	GDA	56	281122	6144251	Open site	Valid	Potential Archaeological Deposit (PAD) : -		103068
	Contact	**Recorders**	Mr.Kelvin Officer,Mr.Adrian Cressey					**Permits**	3791	
52-5-0916	104 Taylors Lane IF1	GDA	56	278014	6143446	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		

Report generated by AHIMS Web Service on 05/02/2020 for Nicole Monk for the following area at Datum :GDA, Zone : 56, Eastings : 275528 - 282951, Northings : 6138576 - 6145416 with a Buffer of 50 meters. Additional Info : Aboriginal Heritage Assessment. Number of Aboriginal sites and Aboriginal objects found is 113

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

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
52-5-0924	Jamieson Road PAD3	GDA	56	279671	6140439	Closed site	Valid	Potential Archaeological Deposit (PAD) : -		
Contact		Recorders	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					Permits		
52-5-0930	Jamieson Road 1	GDA	56	279564	6140276	Closed site	Valid	Art (Pigment or Engraved) : -, Artefact : -, Potential Archaeological Deposit (PAD) : -		
Contact		Recorders	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					Permits		
52-5-0086	Nowra; Grinding Groove	GDA	56	280419	6139564	Closed site	Valid	Artefact : -, Grinding Groove : -	Shelter with Deposit	2048,102506
Contact		Recorders	Unknown Author,Kelleher Nightingale Consulting Pty Ltd,Miss.Kristen Taylor					Permits		
52-5-0554	BCRP 023 Charcoal Oval Art	AGD	56	279757	6140987	Open site	Valid	Artefact : 1		102506
Contact		Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0028	Nowra;	AGD	56	278900	6138900	Closed site	Valid	Artefact : -, Art (Pigment or Engraved) : -	Shelter with Art,Shelter with Deposit	102506
Contact		Recorders	Mr.P Bindon					Permits		
52-5-0421	NO.LC1	AGD	56	279350	6143000	Open site	Valid	Artefact : 4		102301,102506
Contact		Recorders	Mr.Sam Wickman					Permits		
52-5-0423	NO.LC3	AGD	56	280030	6143860	Open site	Valid	Artefact : 1		102301,102506
Contact		Recorders	Mr.Sam Wickman					Permits		
52-5-0547	BCRP 015 West Cambewarra	AGD	56	279472	6141712	Open site	Valid	Artefact : 1		102506
Contact		Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0744	G2B A52	GDA	56	282961	6145388	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
Contact		Recorders	Mr.Adrian Cressey					Permits	3791	
52-5-0746	G2B A54 Cloned	GDA	56	281535	6145221	Open site	Partially Destroyed	Artefact : -, Potential Archaeological Deposit (PAD) : -		103718
Contact		Recorders	Artefact - Cultural Heritage Management ,Artefact - Cultural Heritage Management					Permits	3791	
52-5-0858	Nowra Bridge PAD 4	GDA	56	280356	6139758	Open site	Valid	Potential Archaeological Deposit (PAD) : -		103860
Contact		Recorders	Artefact - Cultural Heritage Management ,Artefact - Cultural Heritage Management					Permits		

Report generated by AHIMS Web Service on 05/02/2020 for Nicole Monk for the following area at Datum :GDA, Zone : 56, Eastings : 275528 - 282951, Northings : 6138576 - 6145416 with a Buffer of 50 meters. Additional Info : Aboriginal Heritage Assessment. Number of Aboriginal sites and Aboriginal objects found is 113

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

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
52-5-0880	Moss Vale Road AFT 1	GDA	56	278238	6142914	Open site	Valid	Artefact : -		103983,103984
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd,Miss.Kristen Taylor					**Permits**		
52-5-0748	G2B A56	GDA	56	281351	6145060	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	**Recorders**	Mr.Adrian Cressey					**Permits**	3791	
52-5-0872	Nowra Bridge 6	GDA	56	280656	6139041	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Artefact - Cultural Heritage Management ,Mr.ryan taddeucci					**Permits**	4479	
52-5-0543	BCRP 007 Stone Circle Site	AGD	56	279551	6141181	Open site	Valid	Artefact : 1		102506
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd					**Permits**		
52-5-0854	Nowra Bridge PAD 5	GDA	56	280757	6139797	Open site	Valid	Potential Archaeological Deposit (PAD) : -		103860
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd,Artefact - Cultural Heritage Management ,A					**Permits**		
52-5-0871	Taylors Lane Artefact 1	GDA	56	277961	6142626	Open site	Valid	Artefact : -		103985,104136
	Contact	**Recorders**	Biosis Pty Ltd - Wollongong,Mrs.Samantha Keats					**Permits**		
52-5-0914	104 Taylors Lane AFT2	GDA	56	277996	6143002	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
52-5-0873	Nowra Bridge 10	GDA	56	280623	6139812	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Artefact - Cultural Heritage Management ,Mr.ryan taddeucci					**Permits**	4479	
52-5-0932	Tapitellee 5	GDA	56	278172	6141863	Open site	Valid	Artefact : 1		
	Contact	**Recorders**	Doctor.Sue Feary					**Permits**	4520	
52-5-0925	Jamieson Road PAD2	GDA	56	279742	6140429	Closed site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact	**Recorders**	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					**Permits**		
52-5-0388	Big Bend 3	AGD	56	280100	6139850	Open site	Valid	Habitation Structure : -		98511,102506
	Contact	**Recorders**	Terry Barratt					**Permits**		
52-5-0686	PASA 4 (Berry - Bomaderry)	GDA	56	281369	6145115	Open site	Valid	Potential Archaeological Deposit (PAD) : -		103068
	Contact	**Recorders**	Mr.Kelvin Officer,Mr.Adrian Cressey					**Permits**	3791	
52-4-0261	BCRP 018 The largest shelter (duplicate of 52-5-0550)	AGD	56	279704	6140277	Closed site	Valid	Artefact : 1		
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd					**Permits**		
52-5-0550	BCRP 018 The largest Shelter	AGD	56	279704	6140277	Open site	Valid	Artefact : 1		102506

Report generated by AHIMS Web Service on 05/02/2020 for Nicole Monk for the following area at Datum :GDA, Zone : 56, Eastings : 275528 - 282951, Northings : 6138576 - 6145416 with a Buffer of 50 meters. Additional Info : Aboriginal Heritage Assessment. Number of Aboriginal sites and Aboriginal objects found is 113

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

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0687	PASA 5 (Berry - Bomaderry)	GDA	56	281491	6145155	Open site	Valid	Potential Archaeological Deposit (PAD) : -		103068
	Contact	Recorders	Mr.Kelvin Officer,Mr.Adrian Cressey					Permits	3791	
52-5-0857	Nowra Bridge 4	GDA	56	280420	6139545	Open site	Valid	Modified Tree (Carved or Scarred) : -		103860
	Contact	Recorders	Artefact - Cultural Heritage Management ,Mr.ryan taddeucci					Permits		
52-5-0017	Wogamia;	AGD	56	275900	6138530	Closed site	Valid	Art (Pigment or Engraved) : -	Shelter with Art	102506
	Contact	Recorders	Australian Museum					Permits		
52-5-0454	BC1/B	AGD	56	279450	6141160	Closed site	Valid	Artefact : 8		102506,103143
	Contact T Russell	Recorders	Mr.Edward Clarke					Permits		
52-5-0540	BCRP 003 The blue metal site	AGD	56	279952	6141083	Open site	Valid	Artefact : -		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0845	Thompsons Point 01 (The Mini Wall)	GDA	56	278242	6138766	Open site	Valid	Art (Pigment or Engraved) : 1		
	Contact	Recorders	Mr.Michael Jackson					Permits		
52-5-0879	Graham Lodge	GDA	56	280888	6139043	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Artefact - Cultural Heritage Management ,Ms.Jennifer Norfolk					Permits		
52-5-0929	Jamieson Road 2	GDA	56	279597	6140277	Closed site	Valid	Art (Pigment or Engraved) : -, Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					Permits		
52-5-0752	G2B A60	GDA	56	280375	6143357	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		103718
	Contact	Recorders	Mr.Adrian Cressey					Permits	3791	
52-5-0839	MM-AD2	GDA	56	280671	6143226	Open site	Valid	Artefact : -		
	Contact	Recorders	Biosis Pty Ltd - Sydney,Mr.James Cole					Permits	4067	
52-5-0840	MM-AD1	GDA	56	280517	6143246	Open site	Valid	Artefact : -		
	Contact	Recorders	Biosis Pty Ltd - Sydney,Mr.James Cole					Permits	4067	
52-5-0920	Bomaderry Creek / Illaroo Road Rockshelter	GDA	56	280416	6139685	Closed site	Valid	Artefact : -		

Report generated by AHIMS Web Service on 05/02/2020 for Nicole Monk for the following area at Datum :GDA, Zone : 56, Eastings : 275528 - 282951, Northings : 6138576 - 6145416 with a Buffer of 50 meters. Additional Info : Aboriginal Heritage Assessment. Number of Aboriginal sites and Aboriginal objects found is 113

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

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd,Miss.Kristen Taylor					Permits		
52-5-0084	Nowra;	AGD	56	279687	6139923	Open site	Valid	Grinding Groove : -	Axe Grinding Groove	2048,98511,102506
	Contact	Recorders	Unknown Author					Permits		
52-5-0262	Bomaderry Ck 5;Bomaderry Creek Nowra;	AGD	56	279420	6141260	Closed site	Valid	Artefact : 5	Shelter with Deposit	2254,98511,102506,103143
	Contact	Recorders	Kerry Navin,Mr.Kelvin Officer,Mr.Edward Clarke					Permits		
52-5-0263	Bomaderry Ck 4;Bomaderry Creek Nowra;	AGD	56	279350	6141400	Closed site	Valid	Artefact : -	Shelter with Deposit	2254,98511,102506,103143
	Contact	Recorders	Kerry Navin,Mr.Kelvin Officer					Permits		
52-5-0035	Nowra (Bomaderry)	AGD	56	280053	6139930	Closed site	Valid	Artefact : -	Shelter with Deposit	531,98511,102506
	Contact	Recorders	Leslie Maynard					Permits		
52-5-0036	Bomaderry;	AGD	56	279800	6139900	Closed site	Valid	Art (Pigment or Engraved) : -, Artefact : -	Shelter with Art,Shelter with Deposit	98511,102506
	Contact	Recorders	Mr.P Bindon					Permits		
52-5-0303	Tapitallee Ck 2;	AGD	56	278020	6141840	Open site	Valid	Artefact : 1	Open Camp Site	102506
	Contact	Recorders	Mr.Doug Williams,Stuart Huys,Mr.Matthew Barber					Permits		
52-5-0386	Big Bend	AGD	56	279770	6140200	Open site	Valid	Art (Pigment or Engraved) : -		98511,102506,103143
	Contact	Recorders	Terry Barratt					Permits		
52-5-0389	Shelter Cave	AGD	56	279900	6140800	Open site	Valid	Habitation Structure : -		98511,102506,103143
	Contact	Recorders	Terry Barratt					Permits		
52-5-0390	Bomaderry Site	AGD	56	279350	6141300	Open site	Valid	Artefact : -		2254,98511,102506,103143
	Contact	Recorders	Terry Barratt					Permits		
52-5-0538	BCP 001 Mosquito Shelter	AGD	56	279793	6141045	Closed site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0541	BCRP 005 Leaning Cliff-Line Site	GDA	56	279983	6140798	Closed site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0551	BCRP 019 Boulder Shelter	AGD	56	280000	6140599	Closed site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0558	BCRP 027 Feather Termination Shelter	AGD	56	282646	6140460	Closed site	Valid	Artefact : 1		
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		

Report generated by AHIMS Web Service on 05/02/2020 for Nicole Monk for the following area at Datum :GDA, Zone : 56, Eastings : 275528 - 282951, Northings : 6138576 - 6145416 with a Buffer of 50 meters. Additional Info : Aboriginal Heritage Assessment. Number of Aboriginal sites and Aboriginal objects found is 113

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

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
52-5-0754	Abernethy's Creek 1	GDA	56	280423	6143083	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	**Recorders**	Mr.Adrian Cressey					**Permits**		
52-5-0684	PASA 2 (Berry - Bomaderry)	GDA	56	280935	6144000	Open site	Valid	Potential Archaeological Deposit (PAD) : -		103068
	Contact	**Recorders**	Mr.Kelvin Officer,Mr.Adrian Cressey					**Permits**	3791	
52-5-0694	EDWARDS AVENUE IF1	GDA	56	281938	6142393	Open site	Valid	Artefact : 1		
	Contact	**Recorders**	Artefact - Cultural Heritage Management					**Permits**		
52-5-0711	PASA 51	GDA	56	281714	6145447	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		103068
	Contact	**Recorders**	Mr.Adrian Cressey,Mr.Adrian Cressey					**Permits**		
52-5-0923	ILLAROO ROAD	GDA	56	278099	6142704	Open site	Valid	Artefact : 1		
	Contact	**Recorders**	Austral Expert Services Pty Ltd,Mr.Miles Robson					**Permits**		
52-5-0387	Big Bend 2	AGD	56	280100	6139950	Open site	Valid	Habitation Structure : -		98511,102506
	Contact	**Recorders**	Terry Barratt					**Permits**		
52-5-0683	PASA 1 (Berry - Bomaderry)	GDA	56	280412	6143352	Open site	Valid	Potential Archaeological Deposit (PAD) : -		103068
	Contact	**Recorders**	Mr.Kelvin Officer,Mr.Adrian Cressey					**Permits**	3791,4067	
52-5-0859	Nowra Bridge PAD 1	GDA	56	280862	6138970	Open site	Not a Site	Potential Archaeological Deposit (PAD) : -		103860
	Contact	**Recorders**	Artefact - Cultural Heritage Management ,Artefact - Cultural Heritage Management					**Permits**	4479	
52-5-0087	Nowra;	AGD	56	280161	6139109	Closed site	Valid	Artefact : -	Shelter with Deposit	2048,102506
	Contact	**Recorders**	Unknown Author					**Permits**		
52-5-0552	BCRP 020 Spotted Gum	AGD	56	279868	6140699	Closed site	Valid	Artefact : 1		102506
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd					**Permits**		
52-5-0564	G2BA1	GDA	56	280171	6142391	Open site	Destroyed	Artefact : 1		103068
	Contact	**Recorders**	Mr.Kelvin Officer,Artefact - Cultural Heritage Management ,Mr.Alex Timms					**Permits**	3791	
52-5-0846	Thompsons Point 02 (The Pocketed Wall)	GDA	56	278242	6138614	Open site	Valid	Art (Pigment or Engraved) : 1		
	Contact	**Recorders**	Mr.Michael Jackson					**Permits**		
52-5-0874	Nowra Bridge 9	GDA	56	280492	6139686	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd,Artefact - Cultural Heritage Management ,M					**Permits**	4479	

Report generated by AHIMS Web Service on 05/02/2020 for Nicole Monk for the following area at Datum :GDA, Zone : 56, Eastings : 275528 - 282951, Northings : 6138576 - 6145416 with a Buffer of 50 meters. Additional Info : Aboriginal Heritage Assessment. Number of Aboriginal sites and Aboriginal objects found is 113

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

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
52-5-0372	Duke 7	AGD	56	277800	6140630	Open site	Valid	Artefact : -	Open Camp Site	102506
	Contact	**Recorders**	S Huys					**Permits**		
52-5-0088	Nowra;	AGD	56	279252	6138817	Closed site	Valid	Artefact : -	Shelter with Deposit	2048,102506
	Contact	**Recorders**	Unknown Author					**Permits**		
52-5-0307	EGP 3-28;Cram Rd Shoalhaven;Eastern Gas Pipline;	AGD	56	277210	6140560	Open site	Valid	Artefact : -	Open Camp Site	102506
	Contact	**Recorders**	Kerry Navin,Mr.Kelvin Officer					**Permits**		
52-5-0455	BC1/F	AGD	56	279970	6140860	Closed site	Valid	Artefact : 1		102506
	Contact T Russell	**Recorders**	Mr.Edward Clarke					**Permits**		
52-5-0546	BCRP 014 West Cambewarra	AGD	56	279266	6141794	Open site	Valid	Artefact : 1		102506
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd					**Permits**		
52-5-0548	BCRP 016 Scar Tree Site	AGD	56	279111	6140447	Open site	Valid	Modified Tree (Carved or Scarred) : 1		102506
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd					**Permits**		
52-5-0549	BCRP 017 Stained Flake	AGD	56	279626	6140197	Closed site	Valid	Artefact : 1		102506
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd					**Permits**		
52-5-0556	BCRP 025 Trenched Drip-line	AGD	56	279496	6141091	Open site	Valid	Artefact : 1		102506
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd					**Permits**		
52-5-0580	PASA45	GDA	56	280118	6142323	Open site	Not a Site	Potential Archaeological Deposit (PAD) : 1		102506
	Contact	**Recorders**	Mr.Kelvin Officer,Mr.Adrian Cressey					**Permits**	3791	
52-5-0747	G2B A55 Cloned	GDA	56	281414	6145161	Open site	Partially Destroyed	Artefact : -, Potential Archaeological Deposit (PAD) : -		103718
	Contact	**Recorders**	Artefact - Cultural Heritage Management ,Artefact - Cultural Heritage Management					**Permits**	3791	
52-5-0751	G2B A59	GDA	56	280458	6143469	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	**Recorders**	Mr.Adrian Cressey					**Permits**	3791	
52-5-0688	PASA 6 (Berry - Bomaderry)	GDA	56	282857	6145382	Open site	Valid	Potential Archaeological Deposit (PAD) : -		103068
	Contact	**Recorders**	Mr.Kelvin Officer,Mr.Adrian Cressey					**Permits**	3791	
52-5-0855	Nowra Bridge 3	GDA	56	280493	6139587	Open site	Not a Site	Artefact : -		103860,103864,103865
	Contact	**Recorders**	Artefact - Cultural Heritage Management ,Artefact - Cultural Heritage Management					**Permits**	4246,4479	

Report generated by AHIMS Web Service on 05/02/2020 for Nicole Monk for the following area at Datum :GDA, Zone : 56, Eastings : 275528 - 282951, Northings : 6138576 - 6145416 with a Buffer of 50 meters. Additional Info : Aboriginal Heritage Assessment. Number of Aboriginal sites and Aboriginal objects found is 113

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

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 2003

Client Service ID : 481699

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
52-5-0860	Nowra Bridge PAD 2	GDA	56	280656	6139039	Open site	Not a Site	Potential Archaeological Deposit (PAD) : -		103860
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd,Artefact - Cultural Heritage Management ,A					**Permits**	4479	
52-5-0861	Nowra Bridge PAD 3 Cliff & Rockshelter Complex	GDA	56	280301	6139573	Open site	Valid	Potential Archaeological Deposit (PAD) : -		103860,103864,103865
	Contact	**Recorders**	Artefact - Cultural Heritage Management ,Artefact - Cultural Heritage Management					**Permits**	4246	
52-5-0878	Nowra Bridge 11	GDA	56	280419	6139564	Open site	Valid	Grinding Groove : -, Habitation Structure : -		
	Contact	**Recorders**	Artefact - Cultural Heritage Management ,Ms.Jennifer Norfolk					**Permits**		
52-5-0875	Nowra Bridge 7	GDA	56	280690	6139577	Open site	Valid	Artefact : -, Habitation Structure : -		
	Contact	**Recorders**	Artefact - Cultural Heritage Management ,Mr.ryan taddeucci					**Permits**	4479	
52-5-0838	Abernethys Creek 2	GDA	56	280581	6143181	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Biosis Pty Ltd - Sydney,Mr.James Cole					**Permits**	4067	
52-5-0927	Jamieson Road 5	GDA	56	279436	6140343	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					**Permits**		
52-5-0745	G2B A53 Cloned	GDA	56	281999	6145442	Open site	Partially Destroyed	Artefact : -, Potential Archaeological Deposit (PAD) : -		103718
	Contact	**Recorders**	Artefact - Cultural Heritage Management ,Artefact - Cultural Heritage Management					**Permits**	3791	
52-5-0712	PASA 52	GDA	56	280341	6143016	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		103068
	Contact	**Recorders**	Mr.Adrian Cressey,Mr.Adrian Cressey					**Permits**	3791	
52-5-0424	NO.LC4	AGD	56	280950	6144840	Open site	Valid	Artefact : 10		102301,102506
	Contact	**Recorders**	Mr.Sam Wickman					**Permits**		

Report generated by AHIMS Web Service on 05/02/2020 for Nicole Monk for the following area at Datum :GDA, Zone : 56, Eastings : 275528 - 282951, Northings : 6138576 - 6145416 with a Buffer of 50 meters. Additional Info : Aboriginal Heritage Assessment. Number of Aboriginal sites and Aboriginal objects found is 113

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

A2: AHIMS SEARCH RESULTS UPDATED – 18 NOVEMBER 2021

© 2022 Austral Archaeology

AHIMS Web Services (AWS)
Search Result

Purchase Order/Reference : 2003

Client Service ID : 481699

Nicole Monk

13 Rutherford Street
Swan Hill Victoria 3585

Attention: Nicole Monk

Email: nicolem@australarch.com.au

Date: 05 February 2020

Dear Sir or Madam:

AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 275528 - 282951, Northings : 6138576 - 6145416 with a Buffer of 50 meters, conducted by Nicole Monk on 05 February 2020.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

113	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the NSW Government Gazette (http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

3 Marist Place, Parramatta NSW 2150
Locked Bag 5020 Parramatta NSW 2220
Tel: (02) 9585 6380 Fax: (02) 9873 8599

ABN 30 841 387 271
Email: ahims@environment.nsw.gov.au
Web: www.environment.nsw.gov.au

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 2109_ACHA_Update

Client Service ID : 639691

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
52-5-0372	Duke 7	AGD	56	277800	6140630	Open site	Valid	Artefact : -	Open Camp Site	102506
Contact		Recorders	S Huys					Permits		
52-5-0017	Wogamia;	AGD	56	275900	6138530	Closed site	Valid	Art (Pigment or Engraved) : -	Shelter with Art	102506
Contact		Recorders	Australian Museum					Permits		
52-5-0084	Nowra;	AGD	56	279687	6139923	Open site	Valid	Grinding Groove : -	Axe Grinding Groove	2048,98511,102506
Contact		Recorders	Unknown Author					Permits		
52-5-0086	Nowra; Grinding Groove	GDA	56	280419	6139564	Closed site	Valid	Artefact : -, Grinding Groove : -	Shelter with Deposit	2048,102506
Contact		Recorders	Unknown Author,Kelleher Nightingale Consulting Pty Ltd,Miss.Kristen Taylor					Permits		
52-5-0087	Nowra;	AGD	56	280161	6139109	Closed site	Valid	Artefact : -	Shelter with Deposit	2048,102506
Contact		Recorders	Unknown Author					Permits		
52-5-0088	Nowra;	AGD	56	279252	6138817	Closed site	Valid	Artefact : -	Shelter with Deposit	2048,102506
Contact		Recorders	Unknown Author					Permits		
52-5-0262	Bomaderry Ck 5;Bomaderry Creek Nowra;	AGD	56	279420	6141260	Closed site	Valid	Artefact : 5	Shelter with Deposit	2254,98511,102506,103143
Contact		Recorders	Kerry Navin,Mr.Kelvin Officer,Mr.Edward Clarke					Permits		
52-5-0263	Bomaderry Ck 4;Bomaderry Creek Nowra;	AGD	56	279350	6141400	Closed site	Valid	Artefact : -	Shelter with Deposit	2254,98511,102506,103143
Contact		Recorders	Kerry Navin,Mr.Kelvin Officer					Permits		
52-5-0287	Abernethys Creek 1;	GDA	56	280464	6142990	Open site	Partially Destroyed	Artefact : -	Open Camp Site	102301,102506
Contact		Recorders	Mr.Kelvin Officer,Mr.Matthew Kelleher,Mr.Matthew Kelleher,Kelleher Nightingale (					Permits	3791	
52-5-0028	Nowra;	AGD	56	278900	6138900	Closed site	Valid	Artefact : -, Art (Pigment or Engraved) : -	Shelter with Art,Shelter with Deposit	102506
Contact		Recorders	Mr.P Bindon					Permits		
52-5-0035	Nowra (Bomaderry)	AGD	56	280053	6139930	Closed site	Valid	Artefact : -	Shelter with Deposit	531,98511,102506
Contact		Recorders	Leslie Maynard					Permits		
52-5-0036	Bomaderry;	AGD	56	279800	6139900	Closed site	Valid	Art (Pigment or Engraved) : -, Artefact : -	Shelter with Art,Shelter with Deposit	98511,102506
Contact		Recorders	Mr.P Bindon					Permits		
52-5-0302	Tapitallee Ck 1;	AGD	56	278000	6141630	Open site	Valid	Artefact : 4	Open Camp Site	102506
Contact		Recorders	Mr.David Johnston,Mr.Sam Wickman,Mr.Matthew Barber,Mr.Douglas Williams					Permits	4784	
52-5-0303	Tapitallee Ck 2;	AGD	56	278020	6141840	Open site	Valid	Artefact : 1	Open Camp Site	102506
Contact		Recorders	Stuart Huys,Mr.Matthew Barber,Mr.Douglas Williams					Permits	4784	

Report generated by AHIMS Web Service on 18/11/2021 for William Andrews for the following area at Datum :GDA, Zone : 56, Eastings : 275528.0 - 282951.0, Northings : 6138576.0 - 6145416.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 111

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

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
52-5-0307	EGP 3-28;Cram Rd Shoalhaven;Eastern Gas Pipline;	AGD	56	277210	6140560	Open site	Valid	Artefact : -	Open Camp Site	102506
	Contact	**Recorders**	Kerry Navin,Mr.Kelvin Officer					**Permits**		
52-2-1797	West Cambewarra Rd.;Bomaderry Creek;	AGD	56	279300	6141700	Open site	Valid	Grinding Groove : -	Axe Grinding Groove	98511,103143
	Contact	**Recorders**	T Bartlett					**Permits**		
52-5-0386	Big Bend	AGD	56	279770	6140200	Open site	Valid	Art (Pigment or Engraved) : -		98511,102506, 103143
	Contact	**Recorders**	Terry Barratt					**Permits**		
52-5-0387	Big Bend 2	AGD	56	280100	6139950	Open site	Valid	Habitation Structure : -		98511,102506
	Contact	**Recorders**	Terry Barratt					**Permits**		
52-5-0388	Big Bend 3	AGD	56	280100	6139850	Open site	Valid	Habitation Structure : -		98511,102506
	Contact	**Recorders**	Terry Barratt					**Permits**		
52-5-0389	Shelter Cave	AGD	56	279900	6140800	Open site	Valid	Habitation Structure : -		98511,102506, 103143
	Contact	**Recorders**	Terry Barratt					**Permits**		
52-5-0390	Bomaderry Site	AGD	56	279350	6141300	Open site	Valid	Artefact : -		2254,98511,10 2506,103143
	Contact	**Recorders**	Terry Barratt					**Permits**		
52-5-0421	NO.LC1	AGD	56	279350	6143000	Open site	Valid	Artefact : 4		102301,10250 6
	Contact	**Recorders**	Mr.Sam Wickman					**Permits**		
52-5-0422	NO.LC2	AGD	56	279970	6143690	Open site	Valid	Artefact : 7		102301,10250 6
	Contact	**Recorders**	Mr.Sam Wickman					**Permits**		
52-5-0423	NO.LC3	AGD	56	280030	6143860	Open site	Valid	Artefact : 1		102301,10250 6
	Contact	**Recorders**	Mr.Sam Wickman					**Permits**		
52-5-0424	NO.LC4	AGD	56	280950	6144840	Open site	Valid	Artefact : 10		102301,10250 6
	Contact	**Recorders**	Mr.Sam Wickman					**Permits**		
52-5-0453	BC1/E	AGD	56	279930	6141030	Closed site	Valid	Artefact : 6		102506,10314 3
	Contact T Russell	**Recorders**	Mr.Edward Clarke					**Permits**		
52-5-0454	BC1/B	AGD	56	279450	6141160	Closed site	Valid	Artefact : 8		102506,10314 3
	Contact T Russell	**Recorders**	Mr.Edward Clarke					**Permits**		
52-5-0455	BC1/F	AGD	56	279970	6140860	Closed site	Valid	Artefact : 1		102506
	Contact T Russell	**Recorders**	Mr.Edward Clarke					**Permits**		
52-5-0538	BCP 001 Mosquito Shelter	AGD	56	279793	6141045	Closed site	Valid	Artefact : 1		102506

Report generated by AHIMS Web Service on 18/11/2021 for William Andrews for the following area at Datum :GDA, Zone : 56, Eastings : 275528.0 - 282951.0, Northings : 6138576.0 - 6145416.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 111

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

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0539	BCRP 002 The black caves	AGD	56	279701	6141045	Open site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0540	BCRP 003 The blue metal site	AGD	56	279952	6141083	Open site	Valid	Artefact : -		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0541	BCRP 005 Leaning Cliff-Line Site	GDA	56	279983	6140798	Closed site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0542	BCRP 006 Pipeline Shelter	AGD	56	279545	6141313	Closed site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0543	BCRP 007 Stone Circle Site	AGD	56	279551	6141181	Open site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0544	BCRP 012 Pitt Street Narang	AGD	56	278907	6141032	Open site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0545	BCRP 013 West Cambewarra	AGD	56	279206	6141669	Open site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0546	BCRP 014 West Cambewarra	AGD	56	279266	6141794	Open site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0547	BCRP 015 West Cambewarra	AGD	56	279472	6141712	Open site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0548	BCRP 016 Scar Tree Site	AGD	56	279111	6140447	Open site	Valid	Modified Tree (Carved or Scarred) : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0549	BCRP 017 Stained Flake	AGD	56	279626	6140197	Closed site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-4-0261	BCRP 018 The largest shelter (duplicate of 52-5-0550)	AGD	56	279704	6140277	Closed site	Valid	Artefact : 1		
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0550	BCRP 018 The largest Shelter	AGD	56	279704	6140277	Open site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0551	BCRP 019 Boulder Shelter	AGD	56	280000	6140599	Closed site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0552	BCRP 020 Spotted Gum	AGD	56	279868	6140699	Closed site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0553	BCRP 022-30 Metres West of Shelter Cave	AGD	56	279917	6140870	Closed site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		
52-5-0554	BCRP 023 Charcoal Oval Art	AGD	56	279757	6140987	Open site	Valid	Artefact : 1		102506
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd					Permits		

Report generated by AHIMS Web Service on 18/11/2021 for William Andrews for the following area at Datum :GDA, Zone : 56, Eastings : 275528.0 - 282951.0, Northings : 6138576.0 - 6145416.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 111

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

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
52-5-0555	BCRP 024 One Silcrete Flake	AGD	56	279675	6141006	Open site	Valid	Artefact : 1		102506
Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd						Permits		
52-5-0556	BCRP 025 Trenched Drip-line	AGD	56	279496	6141091	Open site	Valid	Artefact : 1		102506
Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd						Permits		
52-5-0557	BCRP 026 Rock Fall Canyon Shelter	AGD	56	281896	6140560	Closed site	Valid	Artefact : 1		102506
Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd						Permits		
52-5-0558	BCRP 027 Feather Termination Shelter	AGD	56	282646	6140460	Closed site	Valid	Artefact : 1		
Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd						Permits		
52-5-0564	G2BA1	GDA	56	280171	6142391	Open site	Destroyed	Artefact : 1		103068
Contact	Recorders	Mr.Kelvin Officer,Artefact - Cultural Heritage Management - Pyrmont,Mr.Alex Timn						Permits	3791	
52-5-0580	PASA45	GDA	56	280118	6142323	Open site	Not a Site	Potential Archaeological Deposit (PAD) : 1		102506
Contact	Recorders	Mr.Kelvin Officer,Mr.Adrian Cressey						Permits	3791	
52-5-0746	G2B A54 Cloned	GDA	56	281535	6145221	Open site	Destroyed	Artefact : -, Potential Archaeological Deposit (PAD) : -		103718
Contact	Recorders	Artefact - Cultural Heritage Management - Pyrmont,Artefact - Cultural Heritage Ma						Permits	3791	
52-5-0747	G2B A55 Cloned	GDA	56	281414	6145161	Open site	Partially Destroyed	Artefact : -, Potential Archaeological Deposit (PAD) : -		103718
Contact	Recorders	Artefact - Cultural Heritage Management - Pyrmont,Artefact - Cultural Heritage Ma						Permits	3791	
52-5-0748	G2B A56	GDA	56	281351	6145060	Open site	Destroyed	Artefact : -, Potential Archaeological Deposit (PAD) : -		
Contact	Recorders	Mr.Adrian Cressey,Mr.Matthew Kelleher,Kelleher Nightingale Consulting Pty Ltd (C						Permits	3791	
52-5-0749	G2B A57	GDA	56	281151	6144307	Open site	Destroyed	Artefact : -, Potential Archaeological Deposit (PAD) : -		
Contact	Recorders	Mr.Adrian Cressey,Mr.Matthew Kelleher,Kelleher Nightingale Consulting Pty Ltd (C						Permits	3791	
52-5-0750	G2B A58	GDA	56	280949	6143989	Open site	Destroyed	Artefact : -, Potential Archaeological Deposit (PAD) : -		
Contact	Recorders	Mr.Adrian Cressey,Mr.Matthew Kelleher,Kelleher Nightingale Consulting Pty Ltd (C						Permits	3791	
52-5-0751	G2B A59	GDA	56	280458	6143469	Open site	Destroyed	Artefact : -, Potential Archaeological Deposit (PAD) : -		
Contact	Recorders	Mr.Adrian Cressey,Mr.Matthew Kelleher,Kelleher Nightingale Consulting Pty Ltd (C						Permits	3791	
52-5-0752	G2B A60	GDA	56	280375	6143357	Open site	Destroyed	Artefact : -, Potential Archaeological Deposit (PAD) : -		103718

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

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 2109_ACHA_Update

Client Service ID : 639691

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
	Contact	**Recorders**	Mr.Adrian Cressey,Mr.Matthew Kelleher,Kelleher Nightingale Consulting Pty Ltd (C					**Permits**	3791	
52-5-0753	G2B A61	GDA	56	280248	6142928	Open site	Destroyed	Artefact : -, Potential Archaeological Deposit (PAD) : -		103718
	Contact	**Recorders**	Mr.Adrian Cressey,Mr.Matthew Kelleher,Kelleher Nightingale Consulting Pty Ltd (C					**Permits**	3791	
52-5-0754	Abernethy's Creek 1	GDA	56	280423	6143083	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	**Recorders**	Mr.Adrian Cressey					**Permits**		
52-5-0683	PASA 1 (Berry - Bomaderry)	GDA	56	280412	6143352	Open site	Not a Site	Potential Archaeological Deposit (PAD) : -		103068,104443
	Contact	**Recorders**	Mr.Kelvin Officer,Mr.Adrian Cressey,Mr.Matthew Kelleher,Kelleher Nightingale Cor					**Permits**	3791,4067	
52-5-0684	PASA 2 (Berry - Bomaderry)	GDA	56	280935	6144000	Open site	Not a Site	Potential Archaeological Deposit (PAD) : -		103068
	Contact	**Recorders**	Mr.Kelvin Officer,Mr.Adrian Cressey,Mr.Matthew Kelleher,Kelleher Nightingale Cor					**Permits**	3791	
52-5-0685	PASA 3 (Berry - Bomaderry)	GDA	56	281122	6144251	Open site	Not a Site	Potential Archaeological Deposit (PAD) : -		103068
	Contact	**Recorders**	Mr.Kelvin Officer,Mr.Adrian Cressey,Mr.Matthew Kelleher,Kelleher Nightingale Cor					**Permits**	3791	
52-5-0686	PASA 4 (Berry - Bomaderry)	GDA	56	281369	6145115	Open site	Not a Site	Potential Archaeological Deposit (PAD) : -		103068
	Contact	**Recorders**	Mr.Kelvin Officer,Mr.Adrian Cressey,Mr.Matthew Kelleher,Kelleher Nightingale Cor					**Permits**	3791	
52-5-0687	PASA 5 (Berry - Bomaderry)	GDA	56	281491	6145155	Open site	Not a Site	Potential Archaeological Deposit (PAD) : -		103068
	Contact	**Recorders**	Mr.Kelvin Officer,Mr.Adrian Cressey,Mr.Matthew Kelleher,Kelleher Nightingale Cor					**Permits**	3791	
52-5-0688	PASA 6 (Berry - Bomaderry)	GDA	56	282857	6145382	Open site	Not a Site	Potential Archaeological Deposit (PAD) : -		103068
	Contact	**Recorders**	Mr.Kelvin Officer,Mr.Adrian Cressey,Mr.Matthew Kelleher,Kelleher Nightingale Cor					**Permits**	3791	
52-5-0694	EDWARDS AVENUE IF1	GDA	56	281938	6142393	Open site	Valid	Artefact : 1		
	Contact	**Recorders**	Artefact - Cultural Heritage Management - Pyrmont					**Permits**		
52-5-0712	PASA 52	GDA	56	280341	6143016	Open site	Not a Site	Potential Archaeological Deposit (PAD) : 1, Artefact : -		103068
	Contact	**Recorders**	Mr.Adrian Cressey,Mr.Adrian Cressey,Mr.Matthew Kelleher,Kelleher Nightingale C					**Permits**	3791	
52-5-0838	Abernethys Creek 2	GDA	56	280581	6143181	Open site	Valid	Artefact : -		104443
	Contact	**Recorders**	Biosis Pty Ltd - Sydney,Mr.James Cole					**Permits**	4067	

Report generated by AHIMS Web Service on 18/11/2021 for William Andrews for the following area at Datum :GDA, Zone : 56, Eastings : 275528.0 - 282951.0, Northings : 6138576.0 - 6145416.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 111

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

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
52-5-0839	MM-AD2	GDA	56	280671	6143226	Open site	Valid	Artefact : -		104443
	Contact	**Recorders**	Biosis Pty Ltd - Sydney,Mr.James Cole					**Permits**	4067	
52-5-0852	Nowra Bridge 1	GDA	56	280851	6138971	Open site	Destroyed	Artefact : -		103860
	Contact	**Recorders**	Artefact - Cultural Heritage Management - Pyrmont,Artefact - Cultural Heritage Ma					**Permits**	4479	
52-5-0853	Nowra Bridge 2	GDA	56	280569	6139589	Open site	Destroyed	Artefact : -		103860,103864,103865
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd,Kelleher Nightingale Consulting Pty Ltd,Ar					**Permits**	4246,4479	
52-5-0854	Nowra Bridge PAD 5	GDA	56	280757	6139797	Open site	Valid	Potential Archaeological Deposit (PAD) : -		103860
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd,Artefact - Cultural Heritage Management -					**Permits**		
52-5-0855	Nowra Bridge 3	GDA	56	280493	6139587	Open site	Not a Site	Artefact : -		103860,103864,103865
	Contact	**Recorders**	Artefact - Cultural Heritage Management - Pyrmont,Artefact - Cultural Heritage Ma					**Permits**	4246,4479	
52-5-0856	Nowra Bridge 5	GDA	56	280531	6139565	Open site	Valid	Artefact : -, Habitation Structure : -, Grinding Groove : -		103860
	Contact	**Recorders**	Artefact - Cultural Heritage Management - Pyrmont,Artefact - Cultural Heritage Ma					**Permits**		
52-5-0857	Nowra Bridge 4	GDA	56	280420	6139545	Open site	Valid	Modified Tree (Carved or Scarred) : -		103860
	Contact	**Recorders**	Artefact - Cultural Heritage Management - Pyrmont,Mr.Ryan Taddeucci					**Permits**		
52-5-0858	Nowra Bridge PAD 4	GDA	56	280356	6139758	Open site	Valid	Potential Archaeological Deposit (PAD) : -		103860
	Contact	**Recorders**	Artefact - Cultural Heritage Management - Pyrmont,Artefact - Cultural Heritage Ma					**Permits**		
52-5-0859	Nowra Bridge PAD 1	GDA	56	280862	6138970	Open site	Not a Site	Potential Archaeological Deposit (PAD) : -		103860
	Contact	**Recorders**	Artefact - Cultural Heritage Management - Pyrmont,Artefact - Cultural Heritage Ma					**Permits**	4479	
52-5-0860	Nowra Bridge PAD 2	GDA	56	280656	6139039	Open site	Not a Site	Potential Archaeological Deposit (PAD) : -		103860
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd,Artefact - Cultural Heritage Management -					**Permits**	4479	
52-5-0861	Nowra Bridge PAD 3 Cliff & Rockshelter Complex	GDA	56	280301	6139573	Open site	Valid	Potential Archaeological Deposit (PAD) : -		103860,103864,103865
	Contact	**Recorders**	Artefact - Cultural Heritage Management - Pyrmont,Artefact - Cultural Heritage Ma					**Permits**	4246	
52-5-0845	Thompsons Point 01 (The Mini Wall)	GDA	56	278242	6138766	Open site	Valid	Art (Pigment or Engraved) : 1		
	Contact	**Recorders**	Mr.Michael Jackson					**Permits**		

Report generated by AHIMS Web Service on 18/11/2021 for William Andrews for the following area at Datum :GDA, Zone : 56, Eastings : 275528.0 - 282951.0, Northings : 6138576.0 - 6145416.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 111

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

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
52-5-0846	Thompsons Point 02 (The Pocketed Wall)	GDA	56	278242	6138614	Open site	Valid	Art (Pigment or Engraved) : 1		
	Contact	**Recorders**	Mr.Michael Jackson					**Permits**		
52-5-0840	MM-AD1	GDA	56	280517	6143246	Open site	Valid	Artefact : -		104443
	Contact	**Recorders**	Biosis Pty Ltd - Sydney,Mr.James Cole					**Permits**	4067	
52-5-0871	Taylors Lane Artefact 1	GDA	56	277961	6142626	Open site	Valid	Artefact : -		103985,104136
	Contact	**Recorders**	Biosis Pty Ltd - Wollongong,Mrs.Samantha Keats					**Permits**		
52-5-0878	Nowra Bridge 11	GDA	56	280419	6139564	Open site	Valid	Grinding Groove : -, Habitation Structure : -		
	Contact	**Recorders**	Artefact - Cultural Heritage Management - Pyrmont,Ms.Jennifer Norfolk					**Permits**		
52-5-0879	Graham Lodge	GDA	56	280888	6139043	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	**Recorders**	Artefact - Cultural Heritage Management - Pyrmont,Ms.Jennifer Norfolk					**Permits**		
52-5-0880	Moss Vale Road AFT 1	GDA	56	278238	6142914	Open site	Valid	Artefact : -		103983,103984
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd,Miss.Kristen Taylor					**Permits**	4788	
52-5-0914	104 Taylors Lane AFT2	GDA	56	277996	6143002	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
52-5-0915	104 Taylors Lane AFT1	GDA	56	278029	6143197	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
52-5-0916	104 Taylors Lane IF1	GDA	56	278014	6143446	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
52-5-0872	Nowra Bridge 6	GDA	56	280656	6139041	Open site	Destroyed	Artefact : -		
	Contact	**Recorders**	Artefact - Cultural Heritage Management - Pyrmont,Mr.Matthew Kelleher,Kelleher					**Permits**	4479	
52-5-0873	Nowra Bridge 10	GDA	56	280623	6139812	Open site	Destroyed	Artefact : -		
	Contact	**Recorders**	Artefact - Cultural Heritage Management - Pyrmont,Mr.Matthew Kelleher,Kelleher					**Permits**	4479	
52-5-0874	Nowra Bridge 9	GDA	56	280492	6139686	Open site	Destroyed	Artefact : -		
	Contact	**Recorders**	Kelleher Nightingale Consulting Pty Ltd,Artefact - Cultural Heritage Management -					**Permits**	4479	
52-5-0875	Nowra Bridge 7	GDA	56	280690	6139577	Closed site	Destroyed	Artefact : -, Habitation Structure : -		
	Contact	**Recorders**	Artefact - Cultural Heritage Management - Pyrmont,Mr.Matthew Kelleher,Kelleher					**Permits**	4479	
52-5-0876	Nowra Bridge 8	GDA	56	280531	6139772	Open site	Partially Destroyed	Artefact : -		
	Contact	**Recorders**	Artefact - Cultural Heritage Management - Pyrmont,Mr.Matthew Kelleher,Kelleher					**Permits**	4479	
52-5-0931	Tapitallee Creek 4	GDA	56	278174	6142011	Open site	Valid	Artefact : 1		
	Contact	**Recorders**	Doctor.Sue Feary					**Permits**	4520,4784	

Report generated by AHIMS Web Service on 18/11/2021 for William Andrews for the following area at Datum :GDA, Zone : 56, Eastings : 275528.0 - 282951.0, Northings : 6138576.0 - 6145416.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 111

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

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 2109_ACHA_Update

Client Service ID : 639691

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
52-5-0932	Tapitellee 5	GDA	56	278172	6141863	Open site	Valid	Artefact : 1		
Contact		Recorders	Doctor.Sue Feary					Permits	4520,4784	
52-5-0933	PAELEOCHANNEL 1	GDA	56	278645	6142413	Open site	Valid	Artefact : 1		
Contact		Recorders	Doctor.Sue Feary					Permits	4520,4784	
52-5-0924	Jamieson Road PAD3	GDA	56	279671	6140439	Closed site	Valid	Potential Archaeological Deposit (PAD) : -		
Contact		Recorders	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					Permits		
52-5-0925	Jamieson Road PAD2	GDA	56	279742	6140429	Closed site	Valid	Potential Archaeological Deposit (PAD) : -		
Contact		Recorders	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					Permits		
52-5-0926	Jamieson Road PAD1	GDA	56	279742	6140455	Closed site	Valid	Potential Archaeological Deposit (PAD) : -		
Contact		Recorders	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					Permits		
52-5-0927	Jamieson Road 5	GDA	56	279436	6140343	Open site	Destroyed	Artefact : -		
Contact		Recorders	Navin Officer Heritage Consultants Pty Ltd,Navin Officer Heritage Consultants Pty I					Permits		
52-5-0928	Jamieson Road 4	GDA	56	279616	6140363	Open site	Valid	Artefact : -		
Contact		Recorders	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					Permits		
52-5-0929	Jamieson Road 2	GDA	56	279597	6140277	Closed site	Valid	Art (Pigment or Engraved) : -, Artefact : -, Potential Archaeological Deposit (PAD) : -		
Contact		Recorders	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					Permits		
52-5-0930	Jamieson Road 1	GDA	56	279564	6140276	Closed site	Valid	Art (Pigment or Engraved) : -, Artefact : -, Potential Archaeological Deposit (PAD) : -		
Contact		Recorders	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					Permits		
52-5-0920	Bomaderry Creek / Illaroo Road Rockshelter	GDA	56	280416	6139685	Closed site	Valid	Artefact : -		
Contact		Recorders	Kelleher Nightingale Consulting Pty Ltd,Miss.Kristen Taylor					Permits		
52-5-0923	ILLAROO ROAD	GDA	56	278099	6142704	Open site	Valid	Artefact : 1		
Contact		Recorders	Austral Archaeology Pty Ltd - Liverpool,Mr.Miles Robson					Permits		
52-5-0996	Moss vale road artefact scatter 1	GDA	56	279627	6142082	Open site	Valid	Artefact : -		
Contact		Recorders	Austral Archaeology Pty Ltd - Liverpool,Ms.sejal Pandya					Permits		
52-5-0997	Moss vale road Artefact scatter 2	GDA	56	279504	6142040	Open site	Valid	Artefact : -		
Contact		Recorders	Austral Archaeology Pty Ltd - Liverpool,Ms.sejal Pandya					Permits		

Report generated by AHIMS Web Service on 18/11/2021 for William Andrews for the following area at Datum :GDA, Zone : 56, Eastings : 275528.0 - 282951.0, Northings : 6138576.0 - 6145416.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 111

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

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 2109_ACHA_Update

Client Service ID : 639691

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
52-5-0998	Moss vale road artefact scatter 3	GDA	56	279432	6142095	Open site	Valid	Artefact : -		

Contact **Recorders** Austral Archaeology Pty Ltd - Liverpool,Ms.sejal Pandya **Permits**

**** Site Status**

Valid - The site has been recorded and accepted onto the system as valid

Destroyed - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.

Partially Destroyed - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground

Not a site - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Report generated by AHIMS Web Service on 18/11/2021 for William Andrews for the following area at Datum :GDA, Zone : 56, Eastings : 275528.0 - 282951.0, Northings : 6138576.0 - 6145416.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 111

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

APPENDIX B: PROPOSED WORKS



RESIDENTIAL

	#
TOWNHOUSE 2 storey	12
RESIDENTIAL APARTMENTS 3 storey	121
SENIOR LIVING 2 storey	85
TOTAL	218

NOTE: ALL RESIDENTIAL FLAT BUILDINGS TO HAVE BASEMENT PARKING

COMMERCIAL

BOWLING CLUB	739m²
SCH OFFICE & MIXED USE 2 storey	600m²
COMMERCIAL (BELOW SCH OFFICE)	1,500m²
TOTAL	2,839m²

20 0 20 40 60 80 100 120 140 160 180

Proposed MIXED USE DEVELOPMENT
For Southern Cross Housing
At Moss Vale Road, BOMADERRY NSW 2541

COPYRIGHT OF TILMENT PTY LTD (ACN 003 163 451) trading as EDMISTON JONES © 2018. Nominated Architect Steven Bayer Reg. No. 5880 Tilment Pty Ltd ABN 67 003 163 451
\\10.1.1.200\AEJ nowra\PROJECTS\2019\R19-0011 SCH Moss Vale Rd. Mixed Use\3. DRAWINGS\3. DD1\3.2 Architectural Dwgs\SCH Moss Vale Road.rvt

www.aej.com.au aej@aej.com.au

REV.	DESCRIPTION	DATE
	ISSUE FOR COMMENTS	26/11/19
A	REVISED AFTER CLIENT'S COMMENTS	11/12/19
B	ELECTRICAL EASEMENT REVISION	28/04/20

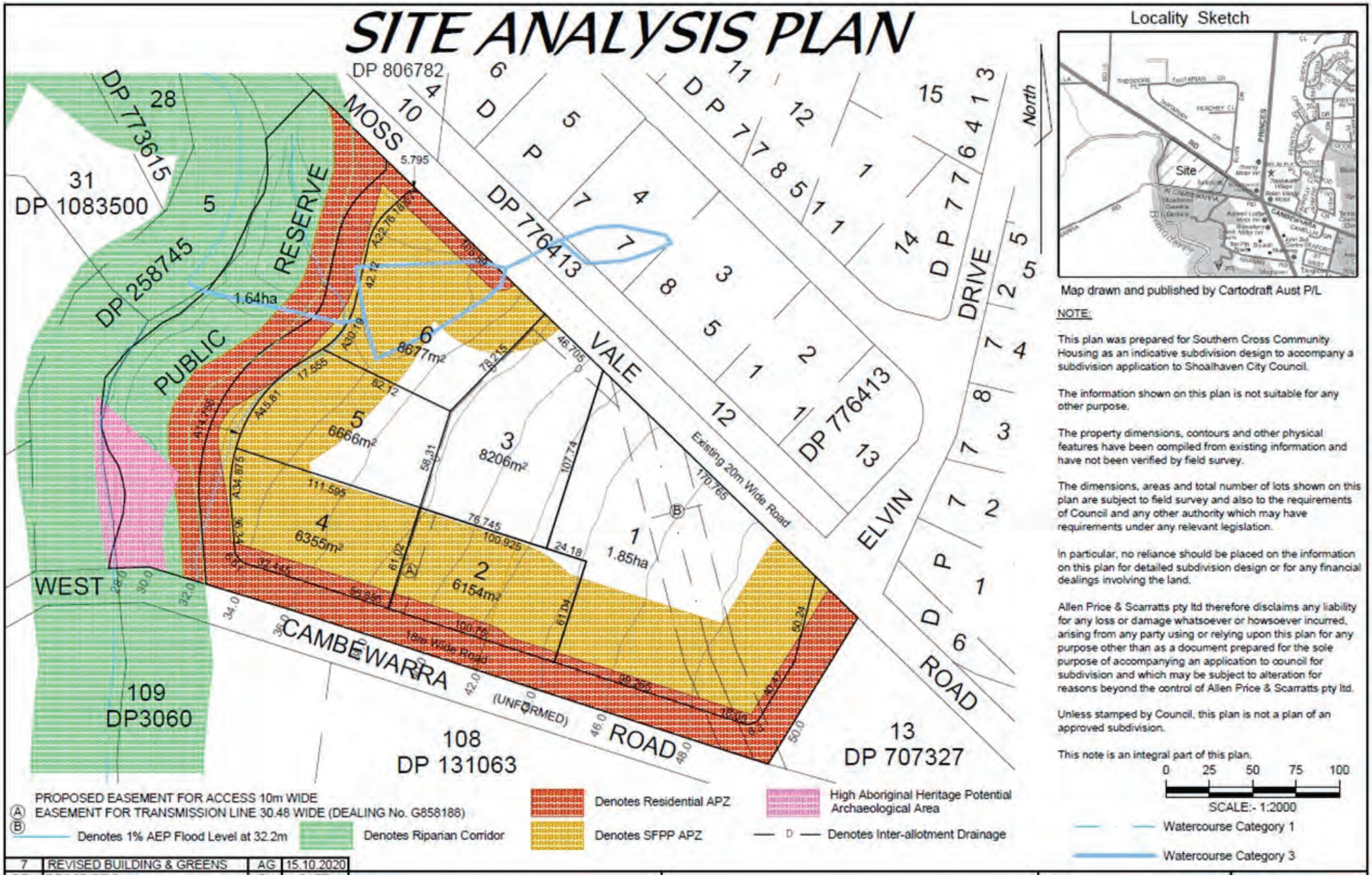
DRAWING TITLE
MASTER PLAN

PROJECT #: R19-0011
SCALE: 1 : 2000 @ A3
DATE: 12/12/19
DRAWN: ES CHECKED: GR

DRAWING NO. S1/01
REVISION B

29/04/2020 9:55:28 AM

SITE ANALYSIS PLAN



Locality Sketch

Map drawn and published by Cartodraft Aust P/L

NOTE:

This plan was prepared for Southern Cross Community Housing as an indicative subdivision design to accompany a subdivision application to Shoalhaven City Council.

The information shown on this plan is not suitable for any other purpose.

The property dimensions, contours and other physical features have been compiled from existing information and have not been verified by field survey.

The dimensions, areas and total number of lots shown on this plan are subject to field survey and also to the requirements of Council and any other authority which may have requirements under any relevant legislation.

In particular, no reliance should be placed on the information on this plan for detailed subdivision design or for any financial dealings involving the land.

Allen Price & Scarratts pty ltd therefore disclaims any liability for any loss or damage whatsoever or howsoever incurred, arising from any party using or relying upon this plan for any purpose other than as a document prepared for the sole purpose of accompanying an application to council for subdivision and which may be subject to alteration for reasons beyond the control of Allen Price & Scarratts pty ltd.

Unless stamped by Council, this plan is not a plan of an approved subdivision.

This note is an integral part of this plan.

0 25 50 75 100

SCALE:- 1:2000

Watercourse Category 1

Watercourse Category 3

7	REVISED BUILDING & GREENS	AG	15.10.2020

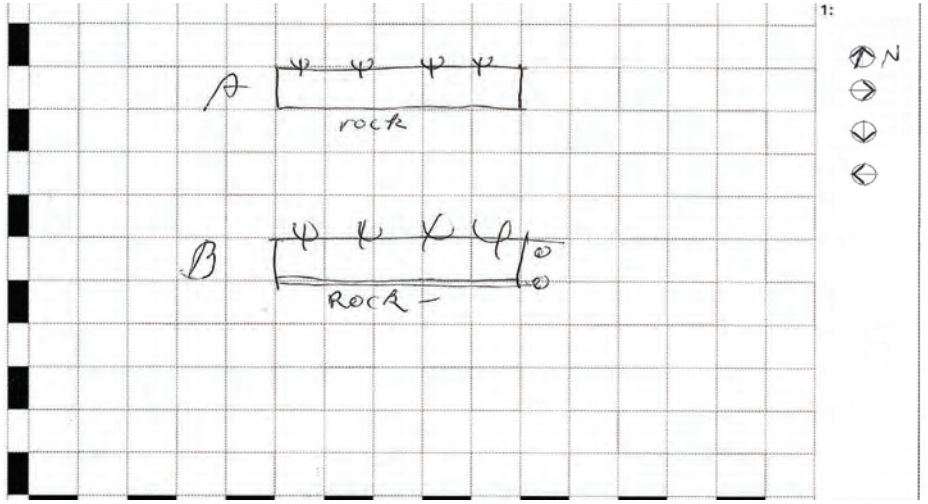
APPENDIX C: TEST EXCAVATION DATA

© 2022 Austral Archaeology

Appendix C Section Drawing of the test pits (Section facing North, scale 1:100mm



TP1



TP1A Context:

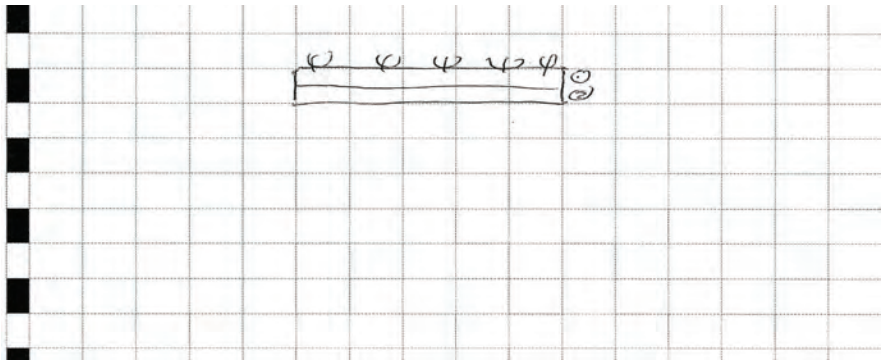
1. Dark grey-brown, silt deposit. With a concentration of charcoal in south-west corner. Munsell: 7.5YR 7/6 and 7.5 YR 6/2.
2. Bedrock.

TP1B Context:

1. Dark grey-brown, silt deposit. Inclusions of charcoal. Munsell: 7.5YR 7/6 and 7.5 YR 6/2.
2. Dark reddish-brown, compact silty clay onto clay. Inclusions of charcoal. Munsell: 7.5YR 3/6.



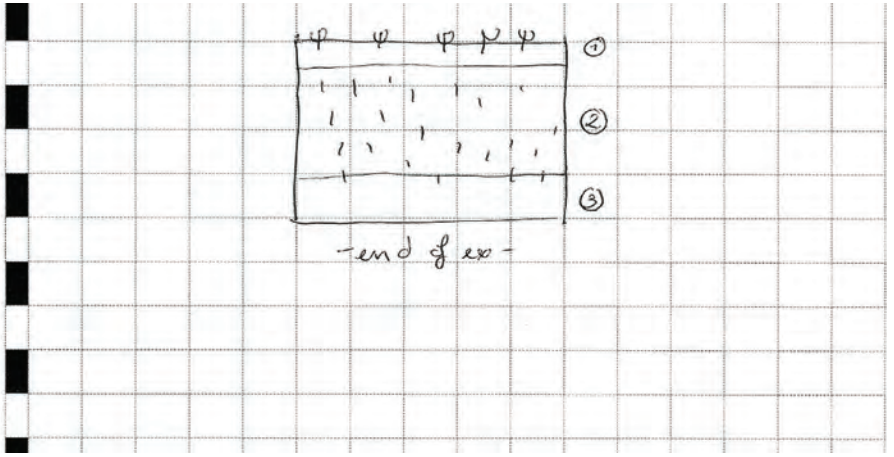
TP2



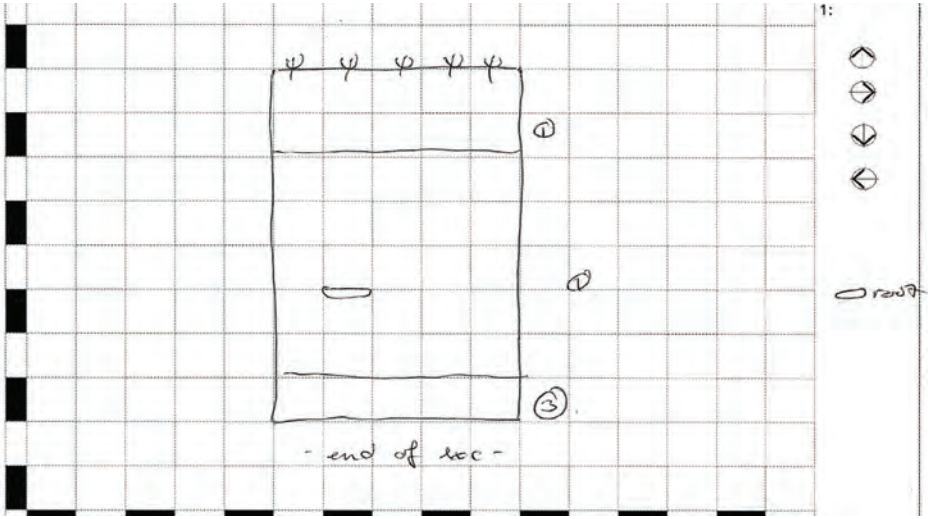
1. Dark grey-brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density. A thin lense of charcoal at 150mm depth. Munsell: 7.5YR 7/6 and 7.5 YR 6/2.
2. Mottled, redish brown, dense and compact, silty clay onto clay. Inclusions of cobble sized sandstone at less than 1% density. Munsell: 7.5YR 3/6



TP3

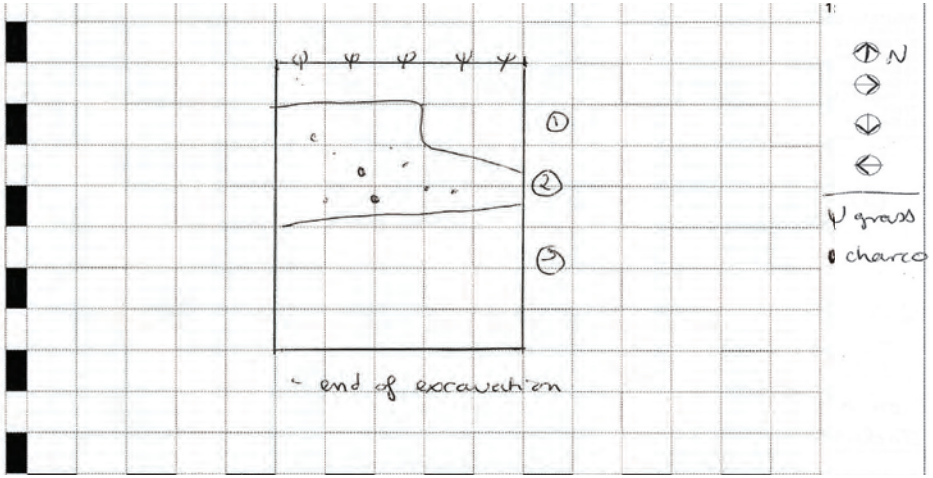


1. Dark grey-brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2.
2. Transition from A Horizon to B Horizon.

	3. Mottled, redish brown, dense and compact, silty clay onto clay. Inclusions of cobble sized sandstone decrease with depth, while clay content increases with depth. Munsell: 7.5YR 3/6
 TP4B	 1. Dark grey-brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density. A thin lense of charcoal at 150mm depth. Munsell: 7.5YR 7/6 and 7.5 YR 6/2. 2. Transition between A Horizon and B Horizon. Small charcoal inclusions. 3. Mottled, yellow-brown and greyish brown, very dry and compact silty clay onto clay. Inclusiosn decreasing with depth.

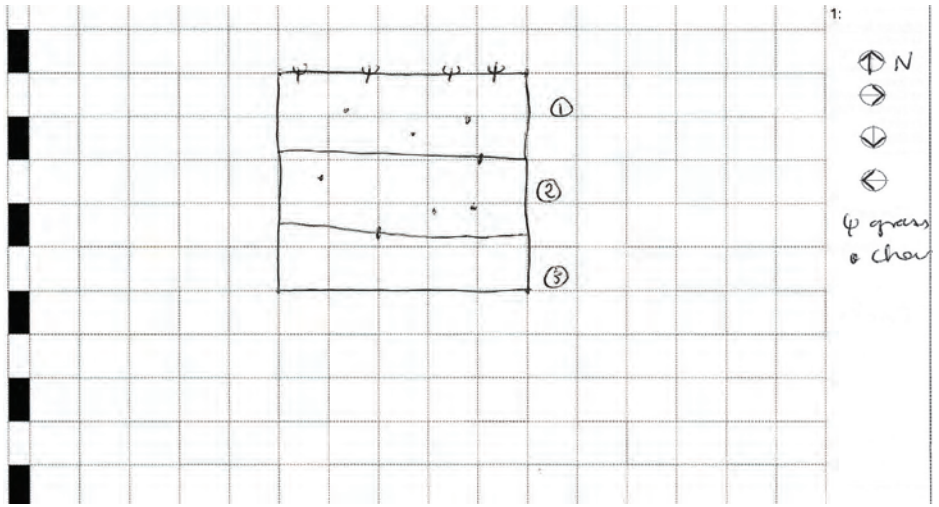


TP5



1. Dark grey-brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density. A thin lense of charcoal at 150mm depth. Munsell: 7.5YR 7/6 and 7.5 YR 6/2.
2. Transition between A Horizon and B Horizon. Small charcoal inclusions.
3. Mottled, yellow-brown and greyish brown, very dry and compact silty clay onto clay. Inclusiosn decreasing with depth.

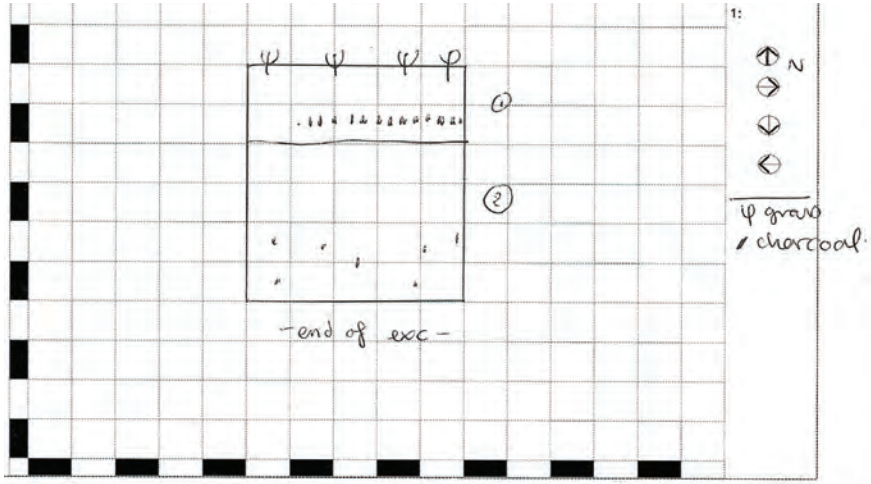
TP 6 had a lot of roots due to the proximity to the pine tree.

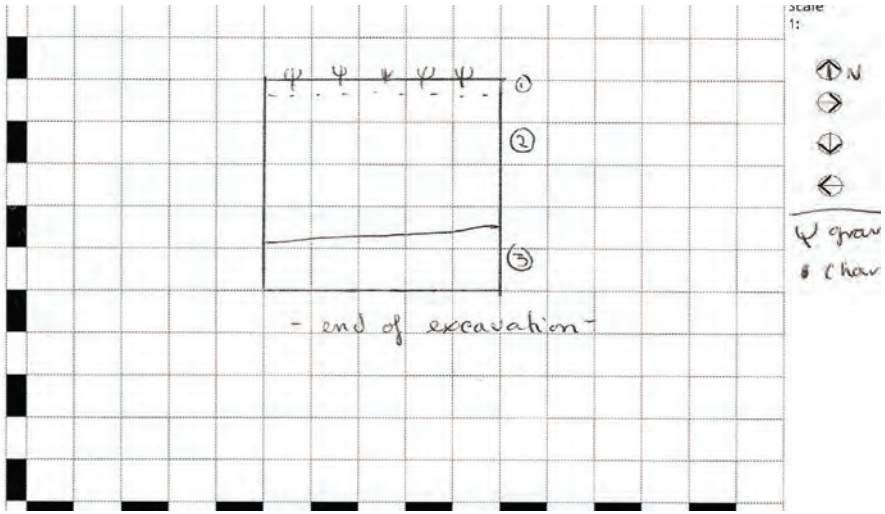


1. Dark grey-brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2.
2. Dark reddish brown. Charcoal inclusions. Munsell: 7.5YR 5/10.
3. Darker reddish brown silty clay onto clay. Munsell: 7.5YR 3/6.



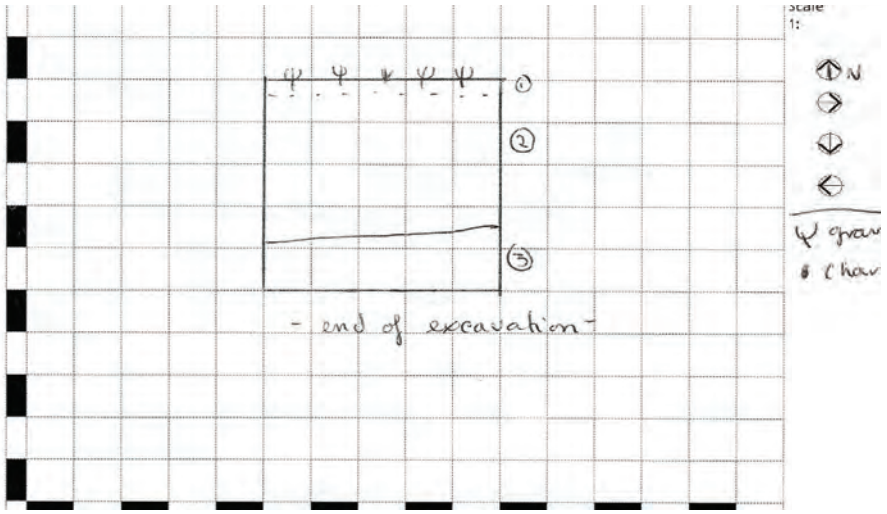
TP7



	1. Dark grey-brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density. A thin lense of charcoal at 150mm depth. Munsell: 7.5YR 7/6 and 7.5 YR 6/2. 2. Mottled, yellow-brown and greyish brown, very dry and compact silty clay onto clay. Inclusiosn decreasing with depth.
 TP8	 1. Dark grey-brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2. 2. Yellow-brown silty clay, onto clay. Pebble sized river pebble inclsuions at less than 1% density. Munsell: 2.5Y 7/8. Clay content increases with depth.



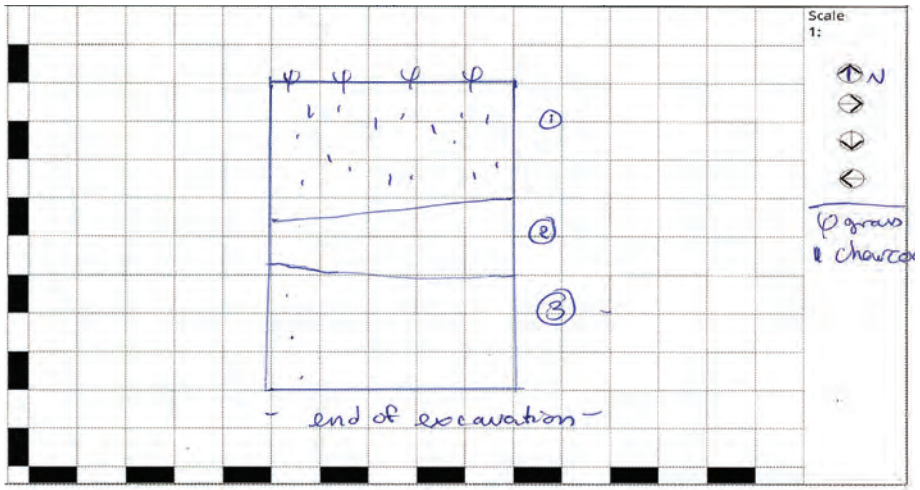
TP9



1. Dark grey-brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2.
2. Dark brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density Munsell: 2.5Y 3/1.
3. Dark brown, wet, clayish silt. Pebble sized river pebble inclsuions at less than 1% density Munsell: 2.5Y 2/1. Clay content and humidity increases with depth.
4. Dark brown silty clay onto clay. Munsell 2.5Y 2/1.



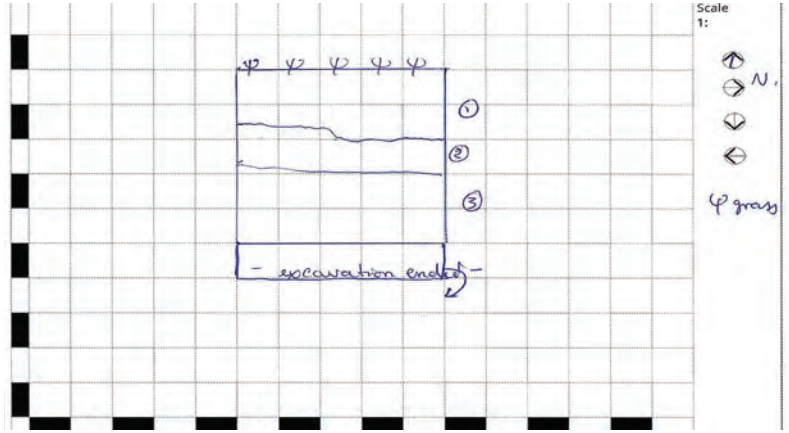
TP10



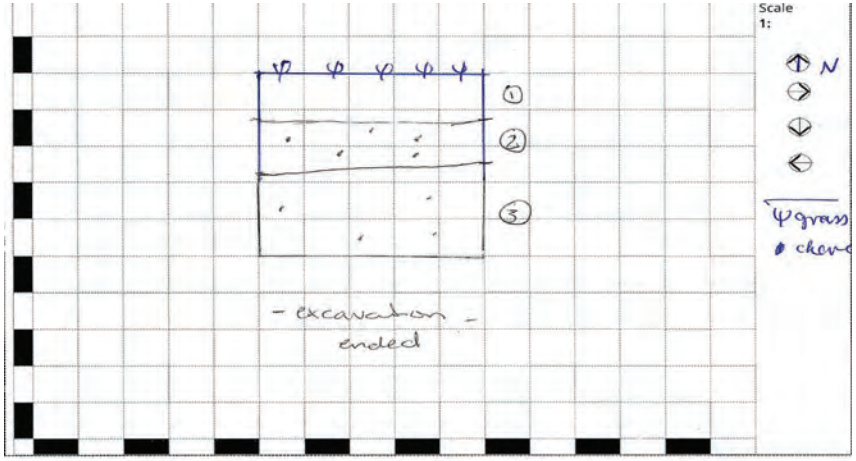
1. Dark grey-brown, compact and dry, silt deposit. Small charcoal inclusions at less than 5% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2.
2. Dull yellow-grey brown silty loam. Munsell 2.5Y 6/3.
3. Dull Grey brown silty clay onto clay. Munsell 2.5Y 6/3.



TP11

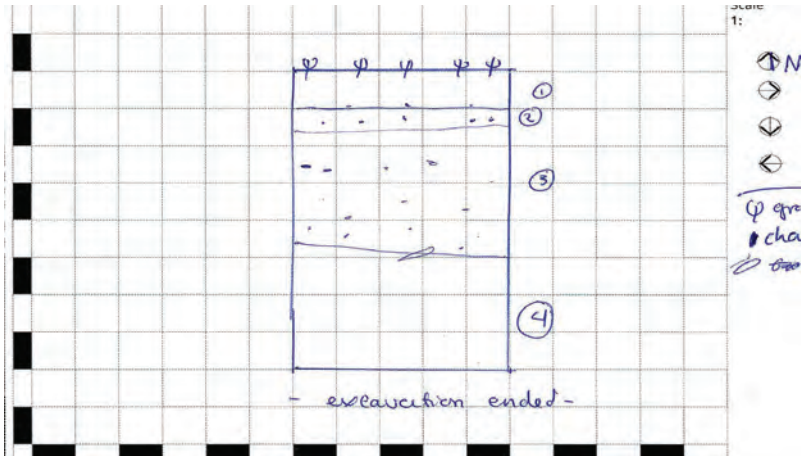


1. Dark grey-brown, compact and dry, silt deposit. Small charcoal inclusions at less than 5% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2.

	2. Transition from the A Horizon to the B Horizon, with charcoal inclusions. 3. Dark reddish brown, silty clay onto clay. Inclusions of sub-angular, pebble sized, quarts, Iron Stone and river pebbles, at decreasing densities with depth. Munsell: 7.5YR 5/10.
 TP12	 1. Dark brown, compact and dry silt deposit. Inclusiosn of river pebbles at less than 5% density. 2. Tranistion between the A Horizon and the B Horizon, with charcoal and river pebble incluisons at 5% density. 3. Dark reddish brown, silty clay onto clay. Inclusions of sub-angular, pebble sized, quarts, Iron Stone and river pebbles, at decreasing densities with depth. Munsell: 7.5YR 5/10.



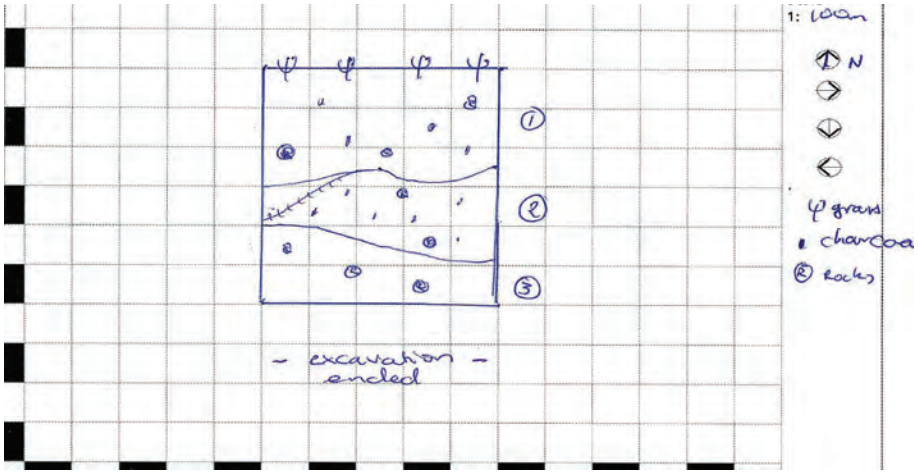
TP13

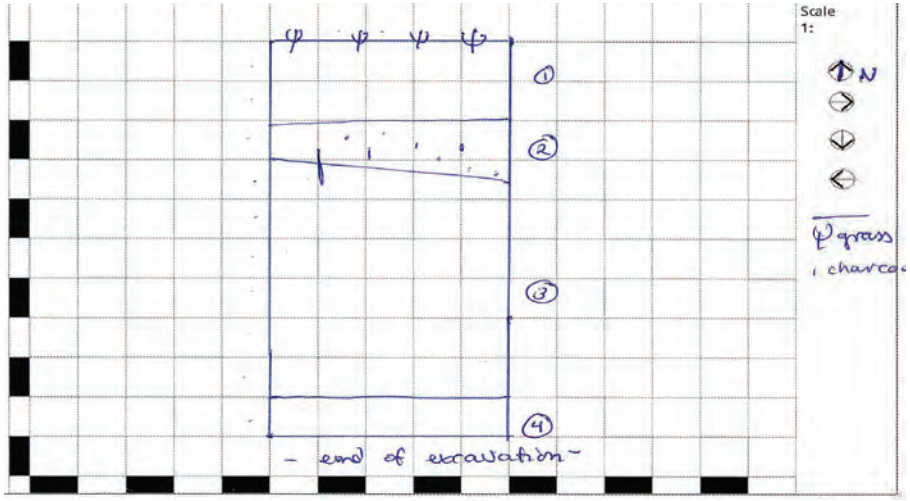


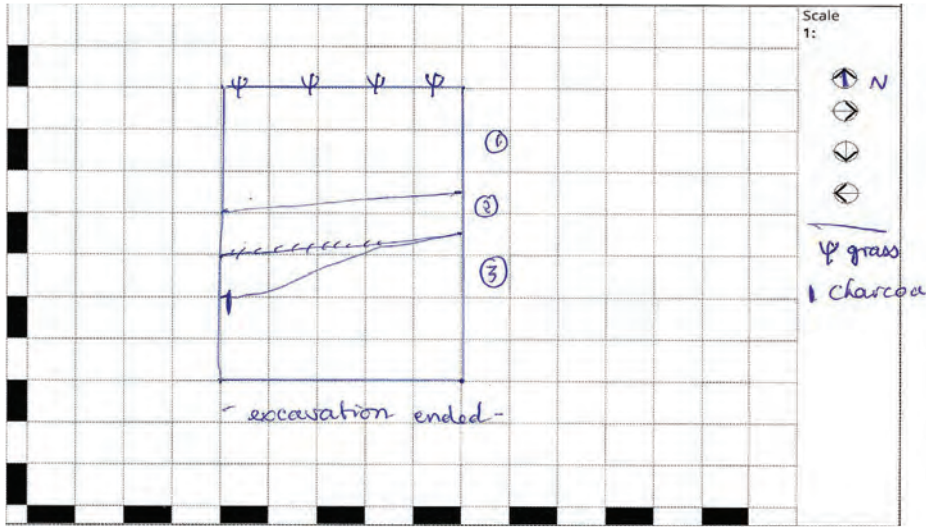
1. Dark grey-brown, compact and dry, silt deposit. Small charcoal inclusions at less than 5% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2.
2. Transition from the A Horizon to the B Horizon, with charcoal inclusions.
3. Dark reddish brown, silty clay onto clay. Inclusions of sub-angular, pebble sized, quarts, Iron Stone and river pebbles, at decreasing densities with depth. Munsell: 7.5YR 5/10.



TP14

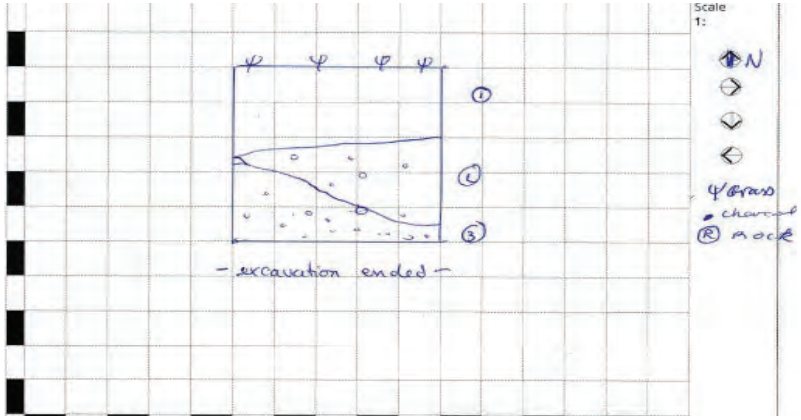


	1. Transition layer between the A Horizon and the B Horizon. Inclusions at 5% density, made up predominently of river pebbles. 2. Dark reddish brown, silty clay onto clay. Inclusions of sub-angular, pebble sized, quarts, Iron Stone and river pebbles, at decreasing densities with depth. Munsell: 7.5YR 5/10.
 TP15	 1. Reddish dark brown, mottled, compact and dry, silt deposit. Small charcoal inclusions at less than 5% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2. 2. Transition from A Horizon ato B Horizon. Vivid reddish brown clayish sand. Inclusions at less than 5% density, sub-angular river pebbles, quartz and Iron stone. 3. Dark reddish brown, silty clay. Inclusions of sub-angular, pebble sized, quarts, Iron Stone and river pebbles, at decreasing densities with depth. Munsell: 7.5YR 5/10. 4. Dark reddish brown, silty clay onto clay. With a majority of clay content. Inclusions of sandstone.

 TP16	 1. Reddish dark brown, mottled, compact and dry, silt deposit. Inclusions at less than 5% density, sub-angular river pebbles, quartz and Iron stone. Munsell: 7.5YR 7/6 and 7.5 YR 6/2. 2. Transition from A Horizon ato B Horizon. Vivid reddish brown clayish sand. Inclusions at less than 5% density, sub-angular river pebbles, quartz and Iron stone. 3. Dark reddish brown, silty clay onto clay. Inclusions of sub-angular, pebble sized, quarts, Iron Stone and river pebbles, at decreasing densities with depth. Munsell: 7.5YR 5/10.
TP17 was abandoned due to proximity to dam	N/A



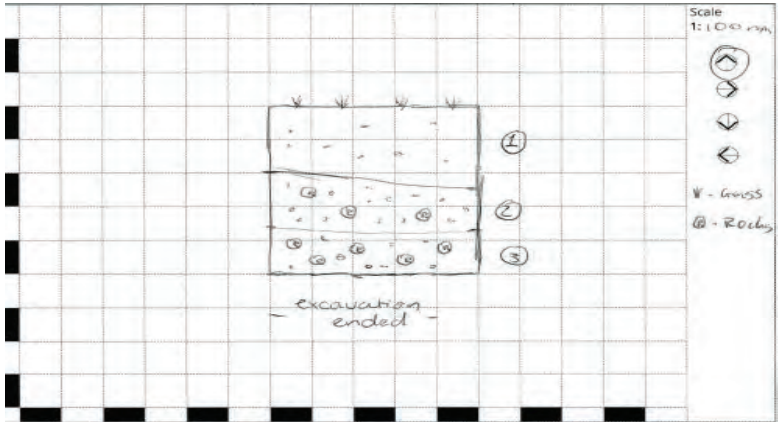
TP18



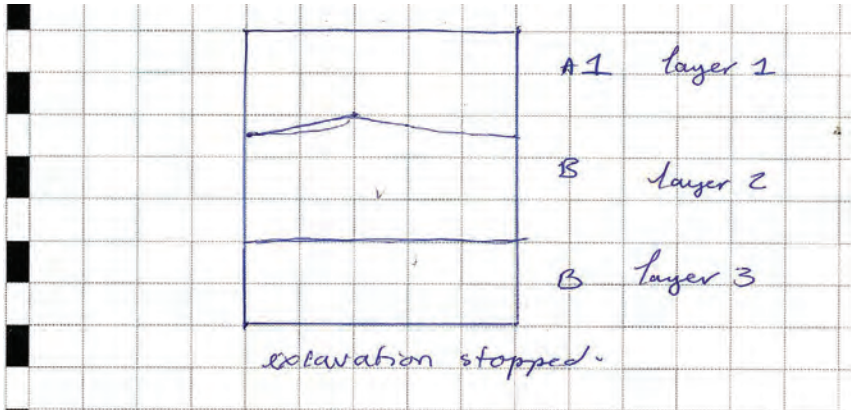
1. Greyish brown, dry compact silt. Munsell 5YR5/1. With less more than 5% in gravel inclusions of pebble size.
2. Transition layer from A Horizon to B Horizon. Increased density of inclusions with depth.
3. Orange brown silty clay onto clay. Inclusions continue of gravel and sandstone to increase with depth. Munsell 10YR 6/8.



TP19

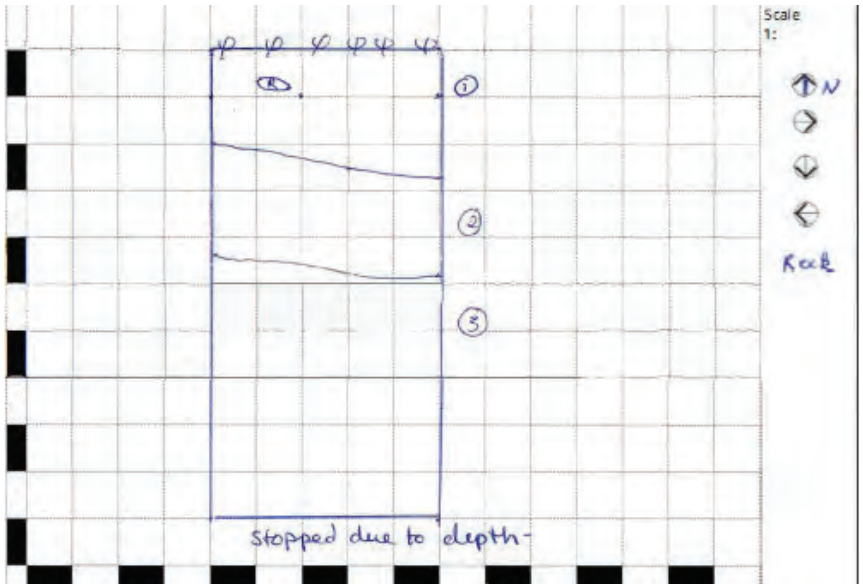


1. Greyish brown, dry compact silt. Munsell 5YR5/1. With less than 5% Iron Stone inclusions of pebble size.
2. Transition A Horizon to B Horizon.

	3. Dark orange brown, very compact silty clay, onto clay with inclusions of pebble and cobble sized Iron stone, sandstone, quartz and river pebbles. Munsell: 10YR 6/8.
 TP20	 1. Greyish brown, dry compact silt. Munsell 5YR5/1. 2. Orangy brown silty loam compact, with inclusions of pebble and cobble sized Iron stone. Density of inclusions increases with depth, along with clay content. Munsell: 10YR 4/8. 3. Dark orange brown silty clay onto clay. With inclusions of pebble and cobble sized Iron stone. Munsell: 10YR 6/8.



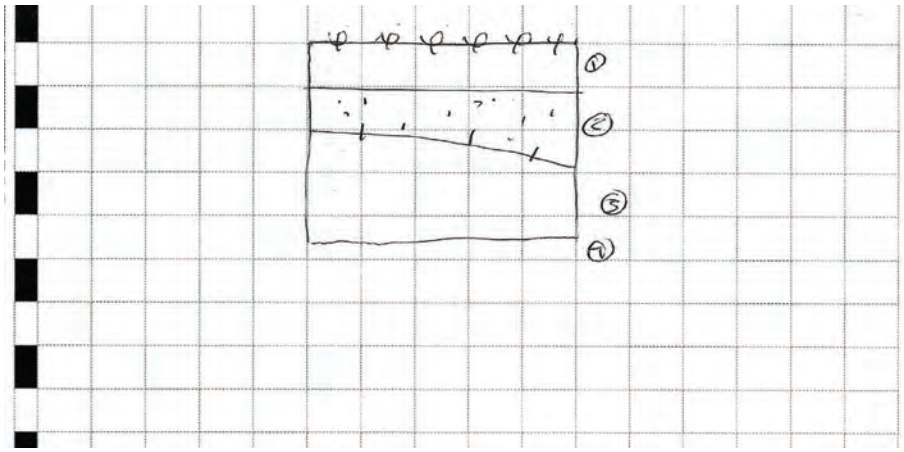
TP21



1. Greyish brown, very loose and dry sandy silt humic soil. Inclusions of gravel at less than 5% density. Munsell: 10YR 5/4
2. Orange, dark brown very compact, silty loam. Start of the much denser inclusions of gravel cobble and pebble sized. Munsell: 10YR 4/8.
3. Orange brown, silty loam onto silty clay. Very compact. Inclusions of gravel and cobble sized ironstone as of 300mm. Munsell: 10YR 6/8.



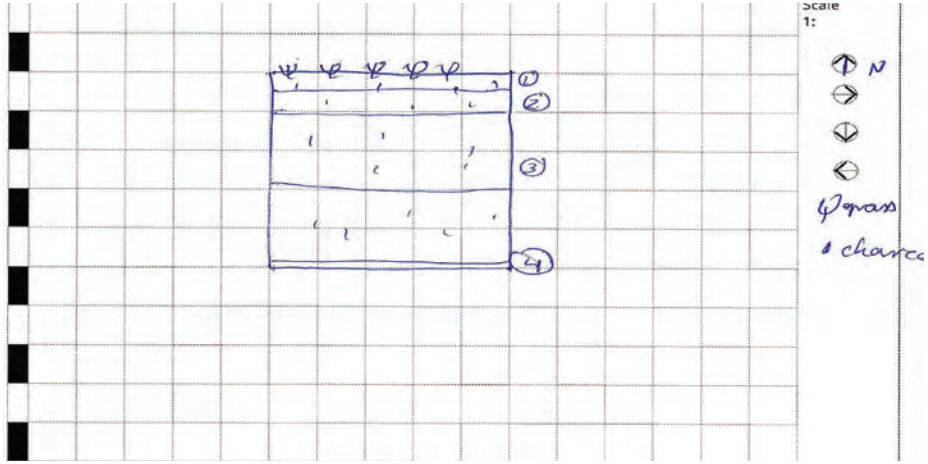
TP22

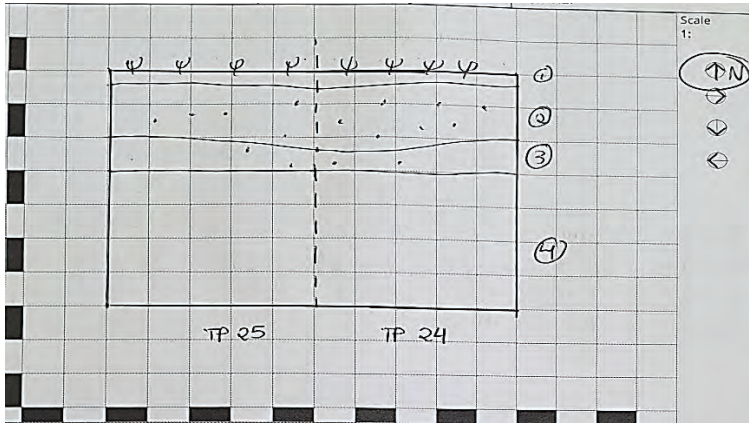


1. Dark grey-brown, compact and dry, silt deposit. Small charcoal inclusions at less than 5% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2.
2. Transition from the A Horizon onto the B Horizon. Inclsuions of charcoal at less than 5% density.
3. Light brown, silty loam. Munsell: 2.5Y 3/4
4. Yellow-brown clayish silt onto clay. Munsell: 2.5Y 7/8.



TP23



	1. 2. Dark grey-brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2. Dryer with depth. 3. Transition from the A Horizon onto the B Horizon. Inclsuions of charcoal at less than 5% density. 4. Light brown, silty clay. Munsell: 2.5Y 3/4
 TP24 & 25	 1. Dark grey-brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2. 2. Light brown, silt layer. Iron stone and charcoal inclusions at less than 5% density. 3. Darker brown sandy silt. Iron stone and charcoal inclusions at less than 5% density. 4. Light brown, silty loam. Munsell: 2.5Y 3/4

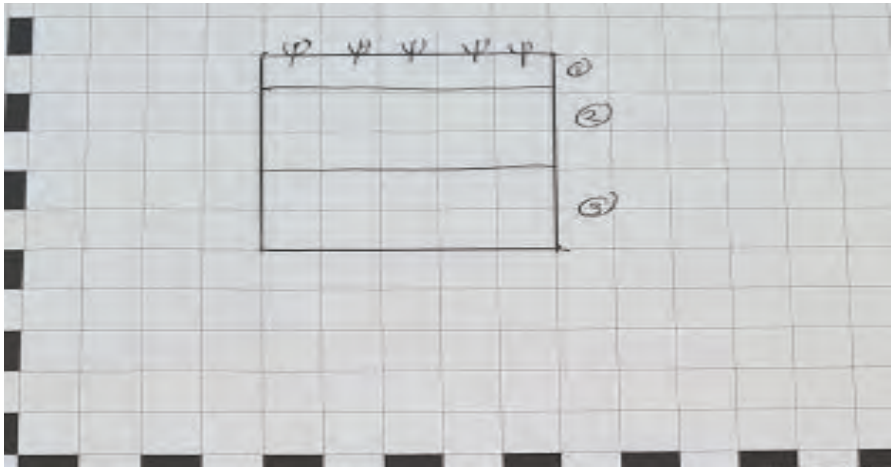


TP26

1. Dark grey-brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2.
2. Light brown, silty loam. Munsell: 2.5Y 3/4
3. Light brown, silty clay. Munsell: 2.5Y 3/4



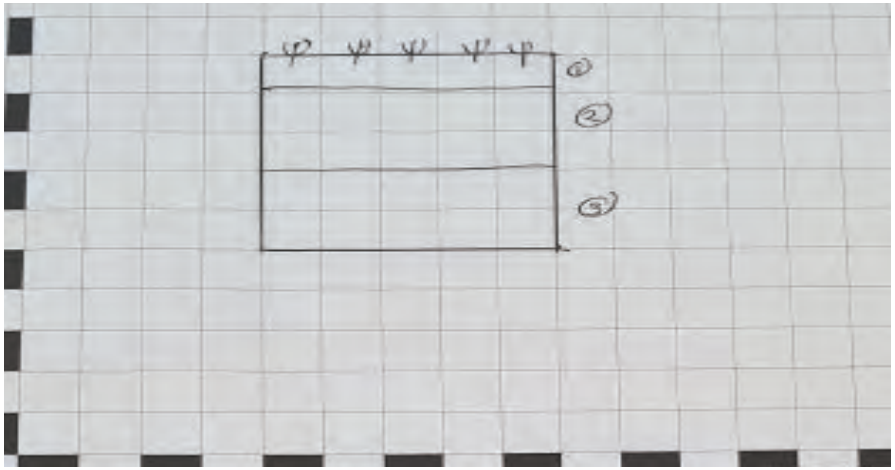
TP27



1. Dark grey-brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2.
2. Light brown, silty loam. Munsell: 2.5Y 3/4
3. Light brown, silty clay. Munsell: 2.5Y 3/4



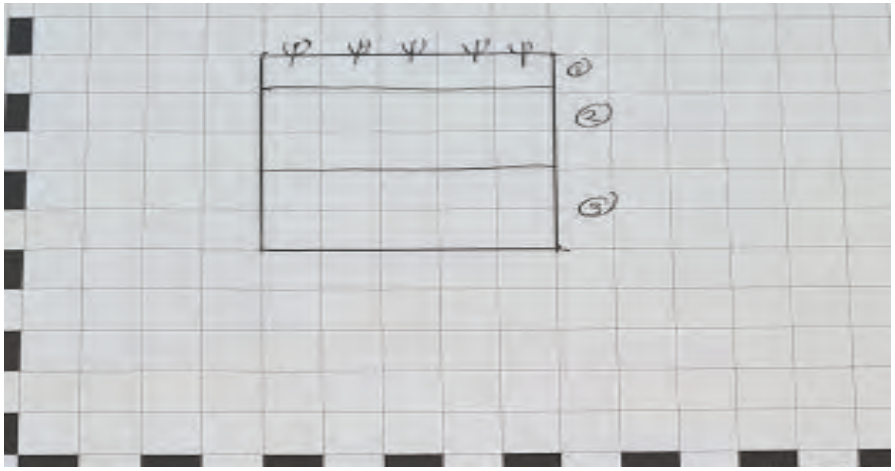
TP28



1. Dark grey-brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2.
2. Light brown, silty loam. Munsell: 2.5Y 3/4
3. Light brown, silty clay. Munsell: 2.5Y 3/4



TP29



	1. Dark grey-brown, wet, silt deposit. Pebble sized river pebble inclsuions at less than 1% density. Munsell: 7.5YR 7/6 and 7.5 YR 6/2. 2. Light brown, silty loam. Munsell: 2.5Y 3/4 3. Light brown, silty clay. Munsell: 2.5Y 3/4Light brown, silty loam. Munsell: 2.5Y 3/4 4. Light brown, silty clay. Munsell: 2.5Y 3/4

APPENDIX D: ARTEFACT DATA CATALOGUE

© 2022 Austral Archaeology

Site ID	Pit Number	Quantity	Total	Type	Raw material	Cortex (%)	Platform type	Platform width (mm)	Platform depth (mm)	Termination	Retouch type	Retouch location(quadrant	Length (mm	Width (mm	Thickness (	Flake scars	Tool type	Weight (g)	Comments Specials ba
2109	3	1	1	complete flake	chert		flat platform	20.9	12.4	feather			39.85	28.89	24			27.56	
2109	5	1	19	distal flake	silcrete	20				feather			15.84	8.96	4.96	0		0.87	
2109	5	1		modified core	chert	25							25.03	24.93	11.62	3	steep edge	16.4	
2109	5	1		complete flake	chalcedony	0	crushed			feather			11.54	8.02	1.2			0.1	
2109	5	1		complete flake	rough chert	0	flaked	14.15	7.53	feather			27.67	25.99	8.22	2		5.94	
2109	5	1		complete flake	jasper	20	flaked	21.69	8.21	feather			26.88	22.93	18.93			11.76	rolled by water
2109	5	1		distal flake	quartzite	10				feather			14.7	7.99	4.59	0		0.61	
2109	5	1		distal flake	silcrete	0				feather			14.31	15.77	7.58	0		1.37	
2109	5	1		complete flake	quartz	0	flaked	6.07	2.93	feather			9.08	12.71	3.13	0		0.4	
2109	5	1		debitage	jasper	25							11.73	6.48	3.54			0.32	
2109	5	1		complete flake	jasper	25	flaked	12.03	19.22	plunge			38.04	13.66	17.7	1	burin	11.94	
2109	5	1		complete flake	quartz	0	crushed			feather			14.07	8.53	4.26			0.63	
2109	5	1		proximal flake	jasper	10	flaked	8.15	2.95				6.63	11.53	2.74	0		0.27	
2109	5	1		complete flake	tuff	50	flaked	30.01	15.65	feather			31.29	32.37	12.13	0		10.71	
2109	5	1		complete flake	silcrete	50	flaked	6.13	3.02	feather			15.29	11.94	2.29	3		0.7	longitudinally broken
2109	5	1		debitage	silcrete	50							27.88	17.09	6.78	0		4.26	
2109	5	1		proximal flake	rough chert	25	flaked	7.18	2.87				6.86	9.73	3.05	0		0.21	
2109	5	1		complete flake	jasper	0	crushed			hinge			9.38	6.06	1.32	0		0.09	pot lid on ventral surface
2109	5	1		complete flake	chert	0	flaked	7.19	1.41	hinge			7.16	10.58	1.91	0		0.13	pot lid on ventral surface
2109	5	1		multi platform core	jasper	5							17.68	10.92	13.94	7		11	
2109	6	1		complete flake	chert		flat platform	7.6	2.23	feather			17.11	9.23	3.12			0.43	
2109	6	1		complete flake	chert		crushed			stepped			14.76	17.87	3.64			0.72	
2109	6	1		complete flake	silcrete		flat platform	14.55	5.65	feather			26.52	27.55	8.95			5.02	
2109	6	1		complete flake	chert		flat platform	12.9	6.7	feather			25.4	13.92	5.58			2.09	
2109	6	1		complete flake	silcrete		flat platform	6.73	4.7	feather			21.37	7.84	5.4			0.9	
2109	7	1		complete flake	jasper	0	flaked	3.08	191	feather			12.99	7.62	1.79			0.18	longitudinally broken
2109	7	1		tool	silcrete	0					scaller and use	lateral margin	31.08	13.05	10.61		elouera	4.11	
2109	7	1		complete flake	chert	0	flaked	7.91	2.12	feather			7.17	7.83	1.67	0		0.16	
2109	7	1		debitage	chert	0							6.61	5.89	2.4			0.15	
2109	7	1		debitage	chert	0							10.73	6.37	2.31			0.23	
2109	7	1		debitage	chert	0							10.83	8.32	5			0.39	
2109	10	1		proximal flake	chert	0	flaked	6.72	3.93				9.71	13.66	4.52			0.87	
2109	10	1		debitage	jasper	90							29.09	15.16	5.15			1.8	
2109	10	1		complete flake	jasper	50	flaked	9.2	4.37	feather			17.81	14.92	4.23			1.28	
2109	10	1		tool	chalcedony	0					scaller	lateral margin	25.46	11.58	3.11		tula	1.02	
2109	10	1		complete flake	chert	0	crushed			feather			9.95	5.59	0.91			0.11	
2109	10	1		complete flake	basalt	0	flaked	12.09	4.4	hinge			15.76	18.93	4.64			2.14	
2109	10	1		complete flake	jasper	50	flaked	19.94	5.52	feather			10.97	20.1	6.41			1.19	
2109	10	1		multi platform core	chert	25							6.71	11.12	15.92	3		15.78	
2109	10	1		distal flake	chert	10					use wear	termination ventral	14.03	15.73	6.14			1.5	
2109	10	1		debitage	chert	0							16.15	11.1	3.93			0.94	
2109	10	1		debitage	silcrete	0							8.84	10.4	1.83			0.31	
2109	10	1		distal flake	chert	0				feather			10.69	5.64	3.62			0.22	left lateral margin is longitudinaly broken
2109	10	1		debitage	jasper	50							14.89	8.36	2.59			0.24	
2109	11	1		proximal flake	chert	0	flat platform	15	9				15	16.3	9.34			3	
2109	11	1		complete flake	basalt		flat platform	35.18	31.23	stepped			77	48.5	33.66			14	
2109	11	1		complete flake	chert		flat platform	4	1.64	feather			13.46	9.3	3.9			0.3	
2109	12	1		distal flake	chert					feather			5.72	8.93	2.64			0.14	
2109	13	1		medial flake	chert								20.77	22.28	8.58			4.47	
2109	13	1		angular fragment	chert								21.42	26.93	11.48			3.33	
2109	13	1		proximal flake	chert		flat platform	15.69	6				25.93	26.15	7.66			5.16	
2109	13	1		distal flake	chert					feather			9.12	12.5	4.89			0.48	
2109	14	1		medial flake	chert								12.32	21.19	7.6			1.86	
2109	14	1		complete flake	chert		crushed			feather			15.61	9.12	2.9			0.35	
2109	14	1		complete flake	chert		crushed			feather			14.08	7.35	2.13			0.22	
2109	19	1		distal flake	silcrete					feather			19.49	27.8	9.26			4.36	
2109	20	1		distal flake	quartz	0				feather			12.56	7.67	1.65	0		0.25	
2109	21	1		tool	chert	25					use wear	lateral margin	26.67	14.6	8.3		tula	3.33	
2109	21	1		debitage	quartz	0							9.84	8.38	1.84			0.27	
2109	21	1		proximal flake	quartz	0	flaked	5.27	4.04				16.37	16.1	4.14			2.24	
2109	22	1		proximal flake	chert	50	flaked	17.77	6.57				14.22	17.27	8.46	0		2.69	
2109	22	1		tool	silcrete	50					scaller		35.4	18.08	8.96	2		6.55	negative flakes on ventral side seem to be rolled by water
2109	22	1		proximal flake	chert	0	crushed			feather			13.43	12.22	2.9	0		0.4	both margins are also longitudinally broken
2109	22	1		debitage	chert	0							11.67	10.49	3.14			0.34	
2109	22	1		medial flake	silcrete	25							16.28	17.83	7.63	1		2.05	right lateral margin is longitudinally broken
2109	22	1		complete flake	chert	75	flaked	15.73	3.9	feather			18.66	16.57	4.1	0		0.98	
2109	22	1		complete flake	quartz	20	crushed			feather			9.51	18.59	8.05	0		1.19	
2109	24	1		distal flake	silcrete	0				stepped			16.26	8.04	1.48			0.24	
2109	24	1		proximal flake	silcrete	25		27.77	10.55				16.67	28.16	12.4			4.36	
2109	24	1		distal flake	silcrete	20				feather			15.98	16.66	5.17			1.54	
2109	24	1		complete flake	jasper	75	flaked	7.69	2.9	feather			13.52	16.31	2.98			0.78	
2109	24	1		distal flake	chert	50				feather			11.14	7.16	3.8			0.26	
2109	24	1		debitage	chert	0							13.24	4.47	3.84			0.4	
2109	24	1		debitage	chert	0							7.65	7.27	5.72			0.38	bulbur scar
2109	24	1		complete flake	chert	5	flaked	9.8	2.28				6.67	10.38	2.37	2		0.22	
2109	25	1		debitage	chert	0							11.28	9.91	1.05			0.18	bulbular scar
2109	25	1		proximal flake	chert	25	flaked	12.93	4.61				15.8	19.4	10.78			2.89	2 very small pot lids on platform
2109	25	1		complete flake	basalt	0	flaked	14.42	5.17	feather	use wear	right lateral margin	33.01	28.17	6.62	1		6.87	
2109	25	1		debitage	chert	0							13.91	9.34	1.1	2		0.19	
2109	25	1		debitage	chert	50							19.3	14.36	2.54			1.15	
2109	25	1		complete flake	silcrete	0	flaked	18.81	3.57	stepped			14.18	23.54	4.83			1.95	
2109	25	1		debitage	jasper	50							19.14	9	2.94			0.83	
2109	25	1		distal flake	chert	0				feather	scaller	termination	20.46	10.06	5.42			1.93	
2109	25	1		distal flake	basalt	0				feather			13.2	8.4	1.95			0.31	
2109	25	1		complete flake	hornfell	0	crushed						8.68	11.26	2.95			0.32	
2109	26	1		distal flake	jasper	0				feather			8.71	5.72	1.18			0.05	
2109	26	1		proximal flake	chert	0	flaked	16.18	4.29				6.6	14.18	4.29			0.65	
2109	26	1		tool	chert	0					scaller and use	lateral margins and terminatio	17.62	21.6	7.08		tulla	3.37	
2109	26	1		complete flake	basalt	0	flaked	8.37	7	feather			20.27	13.39	3.02	1		1.44	longitudinally broken on right lateral margin
2109	26	1		proximal flake	chert	0	flaked	16.65	7.27				14.02	10.78	7.4			1.48	
2109	26	1		proximal flake	jasper	0	flaked	9.25	2.24				13.36	9.2	1.89			0.35	pot lid on dorsal surface
2109	26	1		debitage	chert	15							16.05	11.21	5.07			0.64	
2109	27	1		debitage	chert								10.26	6.31	2.76	1		0.23	
2109	27	1		blade	silcrete	0	flaked	7.03	3.99	feather			14.64	8.52	2.73	0		0.45	
2109	27	1		complete flake	hornfell	75	flaked	15.51	7.93	feather			19.96	17.75	8.48			2.9	
2109	27	1		tool	chert	10					scaller and use	lateral margins and terminatio	19.41	18.79	4.58	1	burin	3.79	
2109	28	1		bipolar flake	chert	30	flaked	15.5	9.57	bipolar	use wear	along termination	22.15	15.59	6.33			3.18	2 other PFAs from previous attempts to brake the flake are located along left lateral margin
2109	28	1		blade	chert	0	crushed			feather			18.85	6.27	2.94			0.45	left lateral margin is longitudinaly broken
2109	28	1		multi platform core	chert	60							31.1	34.46	23.28	5		32.95	
2109	28	1		broken blade	silcrete	50	flaked	17.88	7.46		scaller	left lateral margin	22.88	18.66	8			3	
2109	28	1		complete flake	quartz	0	flaked	9.13	5.45	feather			9.1	10.85	6.04			0.57	
2109	28	1		proximal flake	chert	50	crushed						12.15	16.71	4.42			0.98	Ares line on dorsal is rolled by water
2109	28	1		distal flake	silcrete	70							8.91	19.11	8.15			1.11	
2109	28	1		proximal flake	silcrete	0	flaked	17.09	7.19				10.16	16.51	8.57	1		1.46	both lateral margins are longitudinally broken
2109	30	1		complete flake	banded chert		flat platform	12.84	8	feather			29.82	22.4	12.9			5.77	
2109	30	1		complete flake	chert		flat platform	31.4	23.18	hinge			59.6	53.56	18.14			48.7	
2109	30	1		distal flake						feather			17.6	30.2	13.1			6.25	
2109	4B	1		core fragment	quartz	20							7.73	14.34	6.37	1		1.59	
2109	4b	1		bipolar flake	silcrete	0	crushed						8.85	10.32	3.61			0.39	
2109	4B	1		proximal flake	quartz	0	flaked	11.5	2.32				7.11	15.26	4.3			0.88	
2109	4b	1		complete flake	chert	0	flat platform	6.2	3.79	feather			9.99	16.87	3.83			0.56	
2109	4B	1		core fragment	jasper	10							5.67	16.9	9	2		3.27	Core rejuvenation?
2109	4B	1		debitage	jasper	10							32.39	17.52	13.33			7.37	
2109	4B	1		proximal flake	hornfell	0	crushed						41.96	25.71	5.52	1		3.75	
		114																	

APPENDIX E: PROPOSED REBURIAL LOCATION

© 2022 Austral Archaeology



Appendix E Proposed location for the reburial of artefacts

2109 - 25 Moss Vale Road - N27790

Source: NSW LPI Basemap

Drawn by: WA Date: 2021-04-07

AUSTRAL ARCHAEOLOGY