



View of Wallah Wallah Creek.

ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

GRENFELL POULTRY BREEDER FARM

GRENFELL, NSW 2810

OCTOBER 2021

Report prepared by
OzArk Environment & Heritage
for PSA Consulting (Australia) Pty Ltd
on behalf of Baiada Properties Pty Limited



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ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT COVER SHEET

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Acknowledgement

OzArk acknowledge Traditional Owners of the area on which this assessment took place and pay respect to their beliefs, cultural heritage and continuing connection with the land. We also acknowledge and pay respect to the post-contact experiences of Aboriginal people with attachment to the area and to the elders, past and present, as the next generation of role models and vessels for memories, traditions, culture and hopes of local Aboriginal people.

ABBREVIATIONS AND GLOSSARY

ACHAR	Aboriginal Cultural Heritage Assessment Report. As set out in the <i>Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales</i> , all developments where harm to Aboriginal objects is likely must be assessed in an ACHAR.
ACHCRs	<i>Aboriginal Cultural Heritage Consultation Requirements for Proponents</i> . Guidelines for conducting Aboriginal community consultation for developments where harm to Aboriginal objects is likely.
AHIMS	Aboriginal Heritage Information Management System. Administered by Department of Premier and Cabinet, AHIMS is the central register of all Aboriginal sites within NSW.
ASIRF	Aboriginal Site Impact Recording Form
Code of Practice	<i>Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales</i> under Part 6 NPW Act. Issued by DECCW in 2010, the Code of Practice is a set of guidelines that govern archaeological practice in NSW.
DPIE	NSW Department of Planning, Industry and Environment
EIS	Environmental Impact Statement. A required document for major projects documenting all potential impacts to the environment, including heritage, that may arise due to the development.
GSE	Ground surface exposure. Refers to the amount of ground surface visible in an area.
GSV	Ground surface visibility. Refers to the amount of the ground surface that can be seen in exposures as portions of exposures may be obscured by factors such as leaf litter.
Heritage NSW	Government department tasked with ensuring compliance with the NPW and Heritage Acts. Heritage NSW is advised by the Aboriginal Cultural Heritage Advisory Committee (ACHAC) and is part of the Department of Premier and Cabinet.
NPW Act	<i>National Parks and Wildlife Act 1974</i> . Primary legislation governing Aboriginal cultural heritage within NSW.
PAD	Potential archaeological deposit. Indicates that a particular location has potential to contain subsurface archaeological deposits, although no Aboriginal objects are visible.

RAP	Registered Aboriginal Party. An individual or group who have indicated through the ACHCR process that they wish to be consulted regarding the project.
SEARs	Secretary's Environmental Assessment Requirements issued by the NSW Department of Planning and Environment.
SSD	State Significant Development.

EXECUTIVE SUMMARY

OzArk Environment & Heritage (OzArk) has been engaged by PSA Consulting (Australia) Pty Ltd on behalf of Baiada Properties Pty Limited (the proponent) to complete an *Aboriginal Cultural Heritage Assessment Report* (ACHAR) for the proposed Grenfell Poultry Breeder Farm (the project).

The assessment will form part of an *Environmental Impact Statement* (EIS) being prepared by PSA Consulting (Australia) Pty Ltd to accompany an application for development consent under Division 4.1 and 4.7 of Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) for the project.

This ACHAR has been undertaken in accordance with the *Secretary's Environmental Assessment Requirements* (SEARs), the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW*, and the *Code of Practice for the Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). The Aboriginal cultural heritage assessment of the project has followed the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*.

The project is located 9.4 kilometres north of Grenfell off Gooloogong Road and will involve the construction of a poultry breeder/rearer farm, which will comprise of four farms, with 10 sheds per farm, giving a total of 40 poultry sheds. Access will be via Gooloogong Road and internal access tracks will be constructed to link the farms.

Assessment of the study area took place on Thursday 26 August 2021 with the assistance of a site officer from the Cowra Local Aboriginal Land Council.

During the survey, one Aboriginal cultural heritage site (Wallah Wallah Creek OS-1) was recorded. Wallah Wallah Creek OS-1 is a low-density artefact scatter with associated potential archaeological deposit; however, any associated subsurface deposits are considered unlikely to be intact due to previous levels of disturbance.

Wallah Wallah Creek OS-1 is located within the impact footprint of the proposed access track and will be partially impacted by the project. As such, the site will require management and mitigation measures to be completed prior to the proposed work for the project commencing.

Recommendations concerning Aboriginal cultural values within the study area are as follows:

1. Following development consent of the project, the proponent will develop an *Aboriginal Cultural Heritage Management Plan* (ACHMP) which is to be agreed to by the Registered Aboriginal Parties (RAPs) and the Department of Planning, Industry and Environment (DPIE) (with input from Heritage NSW) to manage Aboriginal cultural heritage associated with the project. The ACHMP will include the salvage methodology, long-term

management of any artefacts, an unanticipated finds protocol, an unanticipated skeletal remains protocol and heritage site inductions for staff and contractors.

2. Following approval of the ACHMP, the portion of Wallah Wallah Creek-OS1 in the impact footprint of the project should be subject to the surface collection methodology set out in **Section 9.2.1.1**; the excavation methodology set out in **Section 9.2.1.2** and fencing outlined in **Section 9.2.1.3**. The salvaged objects should be managed in accordance with the agreed long-term management option detailed in **Section 9.2.1.4**.
3. All land-disturbing activities must be confined to within the study area. Should the parameters of the proposed work extend beyond this, then further archaeological assessment may be required.

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1 INTRODUCTION

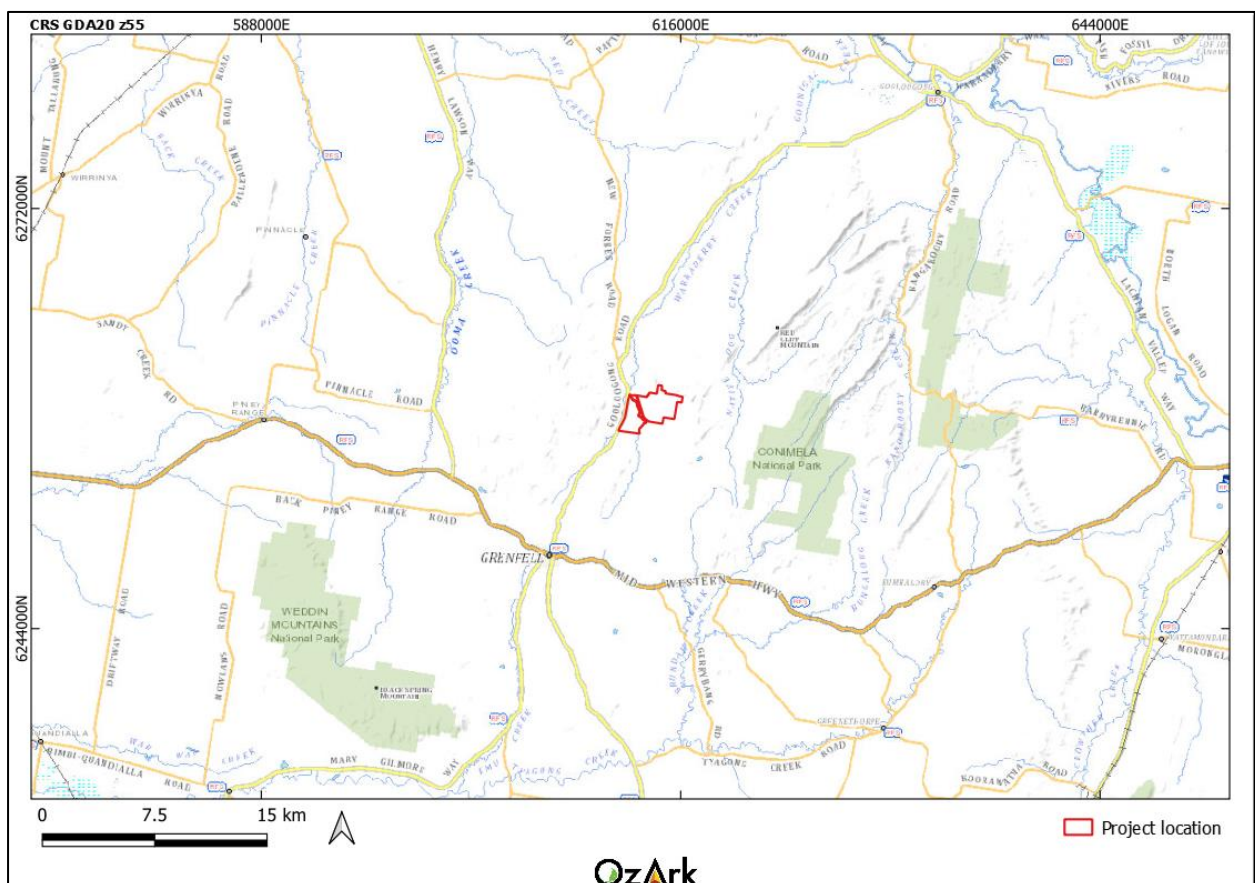
1.1 DESCRIPTION OF THE PROJECT

OzArk Environment & Heritage (OzArk) has been engaged by PSA Consulting (Australia) Pty Ltd on behalf of Baiada Properties Pty Limited (the proponent) to complete an *Aboriginal Cultural Heritage Assessment Report (ACHAR)* for the proposed Grenfell Poultry Breeder and Rearer Farm (the project).

The assessment will form part of an *Environmental Impact Statement (EIS)* being prepared by PSA Consulting (Australia) Pty Ltd to accompany an application for development consent under Division 4.1 and 4.7 of Part 4 of the *Environmental Planning and Assessment Act 1979 (EP&A Act)* for the project.

The project is located 9.4 kilometres (km) north of Grenfell and is within the Weddin Shire Council Local Government Area (**Figure 1-1**).

Figure 1-1: Map showing the location of the project in relation to Grenfell.



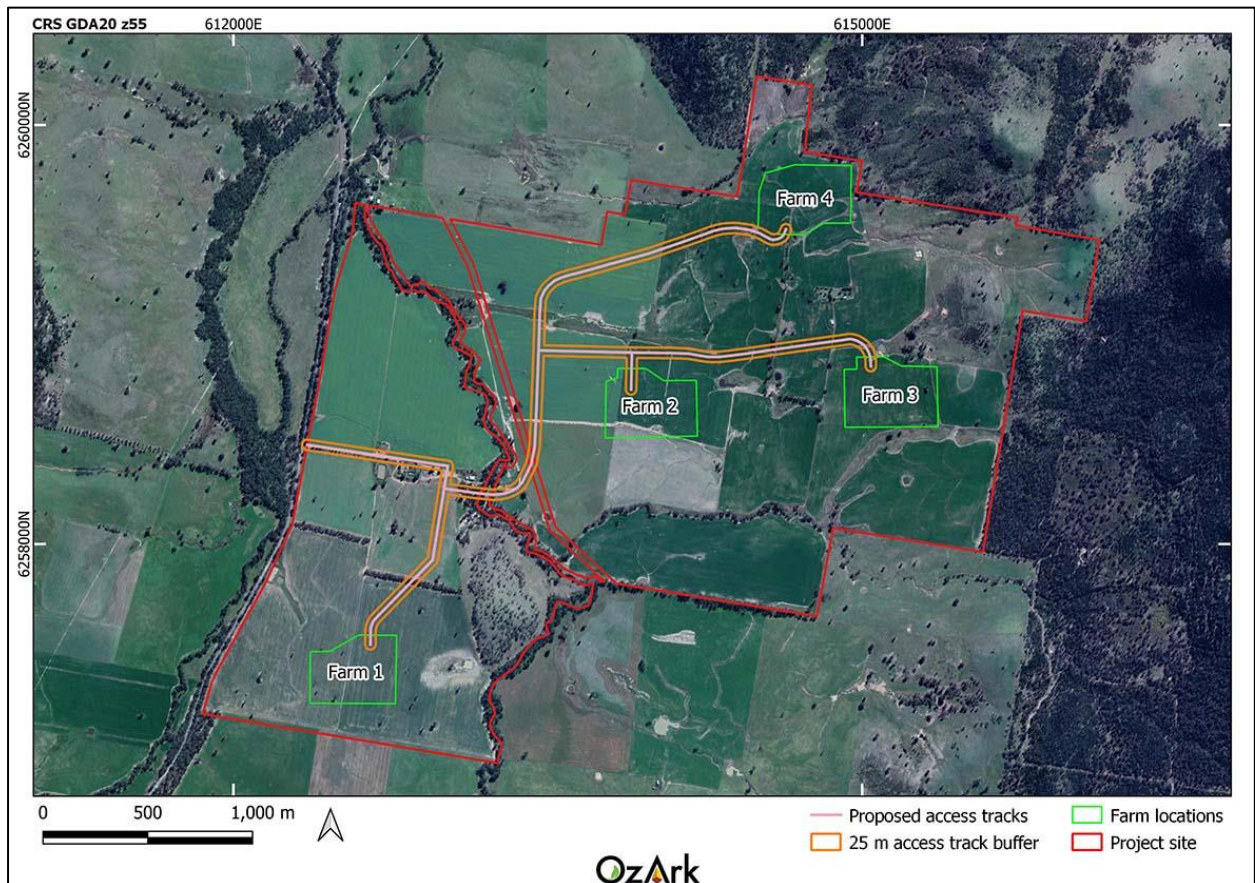
1.2 PROPOSED WORK

The project will involve the construction of a poultry breeder farm, which will comprise four farms, with 10 sheds per farm, giving a total of 40 poultry sheds (**Figure 1-2**). Farms 1 and 4 will have

the capacity to house a maximum of 153,000 and farms 2 and 3 will house up to 132,000 birds, meaning there would be a maximum capacity of 570,000 birds across the project site.

Access will be via Gooloogong Road and internal access tracks will be constructed to link the farms (**Figure 1-2**).

Figure 1-2: Aerial showing the impact footprint of the project.



1.3 PROJECT SITE

The project site is in Lot 1 DP1022013, Lot 1–3 DP1206485 and Lot 22 DP866857 at 1130 Gooloogong Road, Grenfell in central western NSW (**Figure 1-3**).

The project site encompasses approximately 598 ha of agricultural land which is zoned RU1 – Primary Production Zone under the Weddin Local Environmental Plan (LEP) of 2011.

The project site slopes from the northeast to the southwest. The highest point of the project site is in the north-eastern corner at 460 m above sea level (ASL), while the lowest point is along Wallah Wallah Creek at 340 m ASL. Overall, the project site is generally flat to very gently sloping, although there is a small, elevated area in the south that is approximately 20 m higher than the surrounding area.

The project site is intersected by the perennial stream Wallah Wallah Creek, and Warraderry Creek, also a perennial stream, flows parallel to the western boundary of the project site. In

addition, numerous drainage lines associated with Wallah Wallah Creek and Warraderry Creek are within the project site.

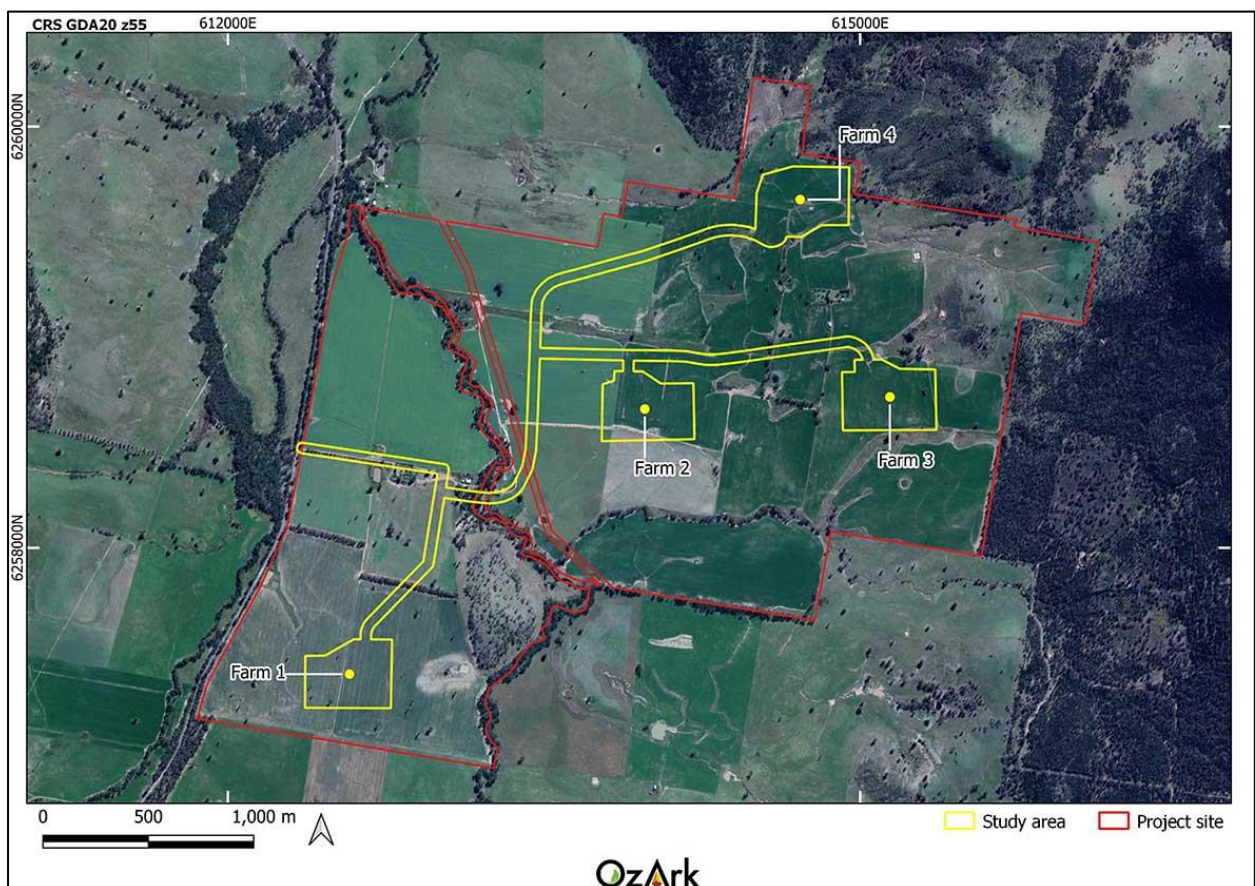
1.4 STUDY AREA

The study area for this project is limited to the four proposed farm locations and a 25 m buffer around the proposed access tracks (**Figure 1-3**). The study area encompasses approximately 80 ha of land.

The study area includes ploughed paddocks across flat to gently undulating landforms and includes a crossing of Wallah Wallah Creek.

This assessment has concentrated on the study area and not the broader project site as all impacts associated with the project will be within the study area.

Figure 1-3: Aerial showing the study area.



2 THE ARCHAEOLOGICAL ASSESSMENT

2.1 RELEVANT LEGISLATION

Cultural heritage is managed by several state and national Acts. Baseline principles for the conservation of heritage places and relics can be found in the *Burra Charter* (Burra Charter 2013). The *Burra Charter* has become the standard of best practice in the conservation of heritage places in Australia, and heritage organisations and local government authorities have incorporated the inherent principles and logic into guidelines and other conservation planning documents. The *Burra Charter* generally advocates a cautious approach to changing places of heritage significance. This conservative notion embodies the basic premise behind legislation designed to protect our heritage, which operates primarily at a state level.

Several Acts of parliament provide for the protection of heritage at various levels of government.

2.1.1 Commonwealth legislation

Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

The EPBC Act, administered by the Commonwealth Department of Agriculture, Water and the Environment, provides a framework to protect nationally significant flora, fauna, ecological communities, and heritage places. The EPBC Act establishes both a National Heritage List and Commonwealth Heritage List of protected places. These lists may include Aboriginal cultural sites or sites in which Aboriginal people have interests. The assessment and permitting processes of the EPBC Act are triggered when a proposed activity or development could potentially have an impact on one of the matters of national environment significance listed by the Act. Ministerial approval is required under the EPBC Act for proposals involving significant impacts to National/Commonwealth heritage places.

Applicability to the project

It is noted there are no Commonwealth or National heritage listed places within the study area, and as such, the heritage provisions of the EPBC Act and other Commonwealth Acts do not apply.

2.1.2 State legislation

Environmental Planning and Assessment Act 1979 (EP&A Act)

This Act established requirements relating to land use and planning. The framework governing environmental and heritage assessment in NSW is contained within the following parts of the EP&A Act:

- Part 4: Local government development assessments, including heritage. May include schedules of heritage items

- Division 4.7: Approvals process for state significant development.

National Parks and Wildlife Act 1974 (NPW Act)

The NPW Act provides for the protection of Aboriginal objects (sites, objects and cultural material) and Aboriginal places. Under the Act (Part 6), an Aboriginal object is defined as: any deposit, object or material evidence (not being a handicraft for sale) relating to indigenous and non-European habitation of the area that comprises NSW, being habitation both prior to and concurrent with the occupation of that area by persons of European extraction, and includes Aboriginal remains.

An Aboriginal place is defined under the NPW Act as an area which has been declared by the Minister administering the Act as a place of special significance for Aboriginal culture. It may or may not contain physical Aboriginal objects.

It is an offence under Section 86 of the NPW Act to ‘harm or desecrate an object the person knows is an Aboriginal object’. It is also a strict liability offence to ‘harm an Aboriginal object’ or to ‘harm or desecrate an Aboriginal place’, whether knowingly or unknowingly. Section 87 of the Act provides a series of defences against the offences listed in Section 86, such as:

- The harm was authorised by and conducted in accordance with the requirements of an *Aboriginal Heritage Impact Permit* (AHIP) under Section 90 of the Act;
- The defendant exercised ‘due diligence’ to determine whether the action would harm an Aboriginal object; or
- The harm to the Aboriginal object occurred during the undertaking of a ‘low impact activity’ (as defined in the regulations).

Under Section 89A of the Act, it is a requirement to notify the Secretary of the Department of Planning, Industry and Environment (DPIE) of the location of an Aboriginal object. Identified Aboriginal items and sites are registered on Aboriginal Heritage Information Management System (AHIMS) that is administered by Heritage NSW.

Applicability to the project

As the project is a State Significant Development (SSD), if approved, Section 4.41 of the EP&A Act will apply and an AHIP under section 90 of the NPW Act to harm Aboriginal objects is not required. Instead, all management related to Aboriginal cultural heritage within the study area will be governed by the policies within an approved *Aboriginal Cultural Heritage Management Plan* (ACHMP).

Under Section 89A of the Act, it is a requirement to notify the Secretary of DPIE of the location of an Aboriginal object. Identified Aboriginal items and sites are registered on the AHIMS register that is administered by Heritage NSW.

Any Aboriginal sites within the study area are afforded legislative protection under the NPW Act.

Secretary's Environmental Assessment Requirements

The Secretary's Environmental Assessment Requirements (SEARs) for the project (SSD-13855457) were issued on 1 March 2021.

The SEARs recognise heritage as a key issue to be examined in the EIS and state:

- *An assessment of Aboriginal and non-Aboriginal heritage items and values of the site and surrounding area in accordance with the relevant Energy and Science guidelines*
- *An Aboriginal Cultural Heritage Assessment Report (ACHAR that outlines procedures to be followed if Aboriginal objects, burials and skeletal material are found at any stage of the life of the project to formulate appropriate measures to manage unforeseen impacts*
- *Consultation with Aboriginal people must be undertaken and documented in the ACHAR.*

To inform the SEARs, Heritage NSW provided input regarding Aboriginal cultural heritage. Heritage NSW input is set out in **Table 2-1** along with a concordance of where Heritage NSW requirements are addressed in this ACHAR.

Table 2-1: Concordance between Heritage NSW input to the SEARs and this ACHAR.

Heritage NSW requirement	Where addressed in the ACHAR
The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the <i>Code of Practice for Archaeological Investigation in NSW</i> (DECCW 2010), and be guided by the <i>Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales</i> (OEH 2011).	This ACHAR contains the results of the Aboriginal archaeological survey undertaken for the project. It also assesses the cultural, scientific, aesthetic, and historic values scientific present within the study area.
Consultation with Aboriginal people must be undertaken and documented in accordance with the <i>Aboriginal cultural heritage consultation requirements for proponents</i> (DECCW 2010). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.	This requirement has been followed by the project and is documented in Section 3 of this ACHAR.
Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to Heritage NSW.	Impacts to Aboriginal cultural heritage within the study area are discussed in Section 8 . Management of Aboriginal cultural heritage within the study area are discussed in Section 9 .
The assessment of Aboriginal cultural heritage values must include a surface survey undertaken by a qualified archaeologist. The results of the surface survey are to inform the need for targeted test excavation to better assess the integrity, extent, distribution, nature and overall significance of the archaeological record. The results of the surface surveys and test excavations are to be documented in the ACHAR.	The results of the surface survey are documented in Section 6 .
The ACHAR must outline procedures to be followed if Aboriginal objects are found at any stage of the life of the project to formulate appropriate measures to manage unforeseen impacts.	Procedures related to any unanticipated Aboriginal objects found within the study area is outlined in Section 9.2.1.4 .

Heritage NSW requirement	Where addressed in the ACHAR
The ACHAR must outline procedures to be followed in the event Aboriginal burials or skeletal material is uncovered during construction to formulate appropriate measures to manage the impacts to this material.	A procedure for the discovery of skeletal material is outlined in Section 9.2.3 .

2.2 ASSESSMENT APPROACH

The archaeological assessment followed the *Code of Practice for the Investigation of Aboriginal Objects in New South Wales* (Code of Practice; DECCW 2010a).

The Aboriginal cultural heritage assessment followed the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (the Guide; OEH 2011) and the *Aboriginal cultural heritage consultation requirements for proponents* (ACHCRs) (DECCW 2010b).

2.3 PURPOSE AND OBJECTIVES

The purpose of the current study is to identify and assess heritage constraints relevant to the proposed works.

2.3.1 Aboriginal cultural heritage assessment objectives

The study will apply the Code of Practice, the Guide, and the ACHCRs in the completion of the Aboriginal cultural heritage assessment to meet the following objectives:

Objective One: Undertake background research on the study area to formulate a predicative model for site location within the study area

Objective Two: Identify and record Aboriginal cultural heritage values within the survey areas. This includes intangible cultural values, Aboriginal objects, and any landforms likely to contain further archaeological deposits

Objective Three: To assess the significance of any recorded Aboriginal cultural values, Aboriginal objects, or sites in consultation with Registered Aboriginal Parties (RAPs)

Objective Four: Assess the likely impacts of the proposed work to Aboriginal cultural heritage values and provide management recommendations.

2.4 REPORT COMPLIANCE WITH THE CODE OF PRACTICE

The Code of Practice establishes requirements that should be followed by all archaeological investigations where harm to Aboriginal objects may be possible. **Table 2-2** tabulates the compliance of this report with the requirements established by the Code of Practice.

Table 2-2: Report compliance with the Code of Practice.

Code of Practice Requirement	Context of the Requirement	Concordance in this report
Requirement 1	Review previous archaeological work	<i>See subsections below</i>
Requirement 1a	Previous archaeological work	Section 5
Requirement 1b	AHIMS searches	Section 5.3.1
Requirement 2	Review the landscape context	Section 4
Requirement 3	Summarise and discuss the local and regional character of Aboriginal land use and its material traces	Section 5
Requirement 4	Predict the nature and distribution of evidence	<i>See subsections below</i>
Requirement 4a	Predictive model	Section 0
Requirement 4b	Predictive model results	Section 5.4.2
Requirement 5	Archaeological survey	<i>See subsections below</i>
Requirement 5a	Survey sampling strategy	Section 6.1
Requirement 5b	Survey requirements	This Requirement was fulfilled during the undertaking of the survey.
Requirement 5c	Survey units	Section 0
Requirement 6	Site definition	Section 5.4.2
Requirement 7	Site recording	<i>See subsections below</i>
Requirement 7a	Information to be recorded	Not applicable to this report as no new sites were recorded.
Requirement 7b	Scales for photography	All artefact photographs employed a centimetre scale bar.
Requirement 8	Location information and geographic reporting	<i>See subsections below</i>
Requirement 8a	Geospatial information	All artefact locations were logged using a non-differential handheld GPS.
Requirement 8b	Datum and grid coordinates	All coordinates are provided in GDA Zone 55.
Requirement 9	Record survey coverage data	Section 6.1 and 0
Requirement 10	Analyse survey coverage	Section 0
Requirement 11	Archaeological Report content and format	This report adheres to this Requirement.
Requirement 12	Records	OzArk undertakes to maintain all survey records for at least five years.
Requirement 13	Notifying OEHS and reporting	<i>See subsections below</i>
Requirement 13a	Notification of breaches	Not applicable
Requirement 13b	Provision of information	Not applicable
Requirement 14	Test excavation which is not excluded from the definition of harm	Test excavation was not undertaken for this assessment.
Requirement 15	Pre-conditions to carrying out test excavation	<i>See subsections below</i>
Requirement 15a	Consultation	Not applicable
Requirement 15b	Test excavation sampling strategy	Not applicable
Requirement 15c	Notification	Not applicable
Requirement 16	Test excavation that can be carried out in accordance with this Code	<i>See subsections below</i>
Requirement 16a	Test excavations	Not applicable
Requirement 16b	Objects recovered during test excavations	Not applicable
Requirement 17	When to stop test excavations	Not applicable

2.5 DATE OF ARCHAEOLOGICAL ASSESSMENT

The fieldwork component of this assessment was undertaken by OzArk on Thursday 26 August 2021.

2.6 OZARK INVOLVEMENT

2.6.1 Field assessment

The fieldwork component of the heritage assessment was undertaken by:

- Fieldwork director: Stephanie Rusden (OzArk Senior Archaeologist, BS University of Wollongong, BA University of New England).

2.6.2 Reporting

The reporting component of the heritage assessment was undertaken by:

- Report author: Stephanie Rusden
- Contributor: Barry Kerton (Sections 1–5, OzArk Archaeologist, BA, BSc, MA Australian National University)
- Contributor: Dr Alyce Cameron (Sections 1–5, OzArk Senior Archaeologist, BA [Hons] and PhD [Archaeology & palaeoanthropology] Australian National University)
- Reviewer: Ben Churcher (OzArk Principal Archaeologist; BA[Hons], University of Queensland; Dip Ed, University of Sydney).

3 ABORIGINAL COMMUNITY CONSULTATION

3.1 INTRODUCTION

No matter who you are, we all have culture. Each person's culture is important; it's part of what makes us who we are.

Many Aboriginal people in Australia have a unique view of the world that's distinct from the mainstream. Land, family, law, ceremony, and language are five key interconnected elements of Aboriginal culture. For example, families are connected to the land through the kinship system, and this connection to land comes with specific roles and responsibilities which are enshrined in the law and observed through ceremony. In this way, the five elements combine to create a way of seeing and being in the world that is distinctly Aboriginal.

Aboriginal and Torres Strait Islander peoples are connected to Country through lines of descent (paternal and maternal), as well as clan and language groups. Territory is defined by spiritual as well as physical links. Landforms have deep meaning, recorded in art, stories, songs, and dance. Songlines or Dreaming Tracks as well as kinship structures link Aboriginal peoples to the territories of other groups. In the past, these links were also used for trade.

Living on this land for more than 60,000 years, Aboriginal and Torres Strait Islanders established effective ways to use and sustain resources. One important aspect is the right of certain people to control the use of resources in a particular area, as well as cultural and spiritual values like totemism that were fundamental in resource management. There was a wide range of traditional methods for gathering food including fish traps, subsistence agriculture, hunting and harvesting a wide range of natural fruits and vegetables. Some groups of people would stay in one place, while others moved around the land according to the seasons, to ensure sustainable and rich food supplies, and to fulfil their spiritual and cultural obligations.

In much of eastern Australia, Aboriginal communities live their lives like most Australians without resorting to tribal lore. However, in certain crucial areas, particularly associated with family, leadership roles and caring for Country, Aboriginal lore continues, even in the most urbanised communities.

3.2 ABORIGINAL COMMUNITY CONSULTATION

The Aboriginal cultural heritage assessment of the project has followed the ACHCRs. The consultation log and copies of correspondence with Aboriginal community stakeholders is presented in Appendix 1.

The ACHCRs include four main stages, and these will be detailed in the following subsections.

3.2.1 ACHCRs Stage 1

The aim of Stage 1 is to identify the RAPs who wish to be consulted about the project.

On Wednesday 7 July 2021, an advertisement was placed in the *Grenfell Record* requesting expressions of interest in being consulted about the project (**Appendix 1 Figure 2**). In addition, the following agencies were contacted on Thursday 1 July 2021 to identify potential stakeholders for the area (**Appendix 1 Figure 3** and **Appendix 1 Figure 4**):

- Heritage NSW
- Cowra Local Aboriginal Land Council (LALC)
- Office of The Registrar, *Australian Land Rights Act 1976*
- National Native Title Tribunal
- Native Title Services Corporation (NTSCORP)
- Weddin Shire Council
- Central West Local Land Services.

Letters were then sent to all potential stakeholders on Thursday 8 July 2021 asking if they wished to be consulted about the project (**Appendix 1 Figure 5**).

As a result, the following groups or individuals registered to be consulted about the project:

- Cowra LALC
- Didge Ngunawal Clan
- Stakeholder 1
- Stakeholder 2

Those individuals or groups who did not wish to be identified in the public documents are referred to as 'Stakeholder 1' etc.

3.2.2 ACHCRs Stages 2 & 3

The aim of Stages 2 and 3 is provide information about the proposal to the RAPs and to acquire information regarding Aboriginal cultural values associated with the project either through consultation and/or field work. Often these two stages are run together, and the detailed project information is provided in the assessment methodology that is issued to all RAPs for their consideration.

On Tuesday 27 July 2021, all RAPs were sent information about the project and a draft of the assessment methodology (**Appendix 1 Figure 6** and **Appendix 1 Figure 7**). RAPs were provided the stipulated 28 days to review and comment on these documents as per Stage 3 of the ACHCRs. The closing date for comment was Tuesday 24 August 2021.

Responses were received from the Didge Ngunawal Clan and Stakeholder 1 on Wednesday 28 July 2021 and Monday 2 August 2021, respectively, supporting the proposed assessment methodology.

3.2.3 ACHCRs Stage 4

Stage 4 involves the production of a draft ACHAR that is issued to all RAPs for their consideration. The ACHAR will document the results of the assessment, outline opportunities for the conservation of Aboriginal cultural values, and suggest recommendations for the management of Aboriginal objects should impacts to these objects be unavoidable.

A copy of the draft ACHAR was distributed to all RAPs for review on 14 September 2021 with a 28-day review period closing 13 October 2021 (**Appendix 1 Figure 8**).

A response was received from Stakeholder 2 noting they agreed with the document (**Appendix 1 Figure 9**).

3.3 ABORIGINAL COMMUNITY INVOLVEMENT IN THE FIELD ASSESSMENT

The field assessment was attended by Stuart Cutmore representing the Cowra LALC.

3.4 CULTURAL VALUES IDENTIFIED THROUGHOUT THE ACHCR PROCESS

No specific cultural values were identified by the RAPs regarding the study area; however, the strong cultural values of Aboriginal communities towards landscapes and cultural heritage sites are recognised.

4 LANDSCAPE CONTEXT

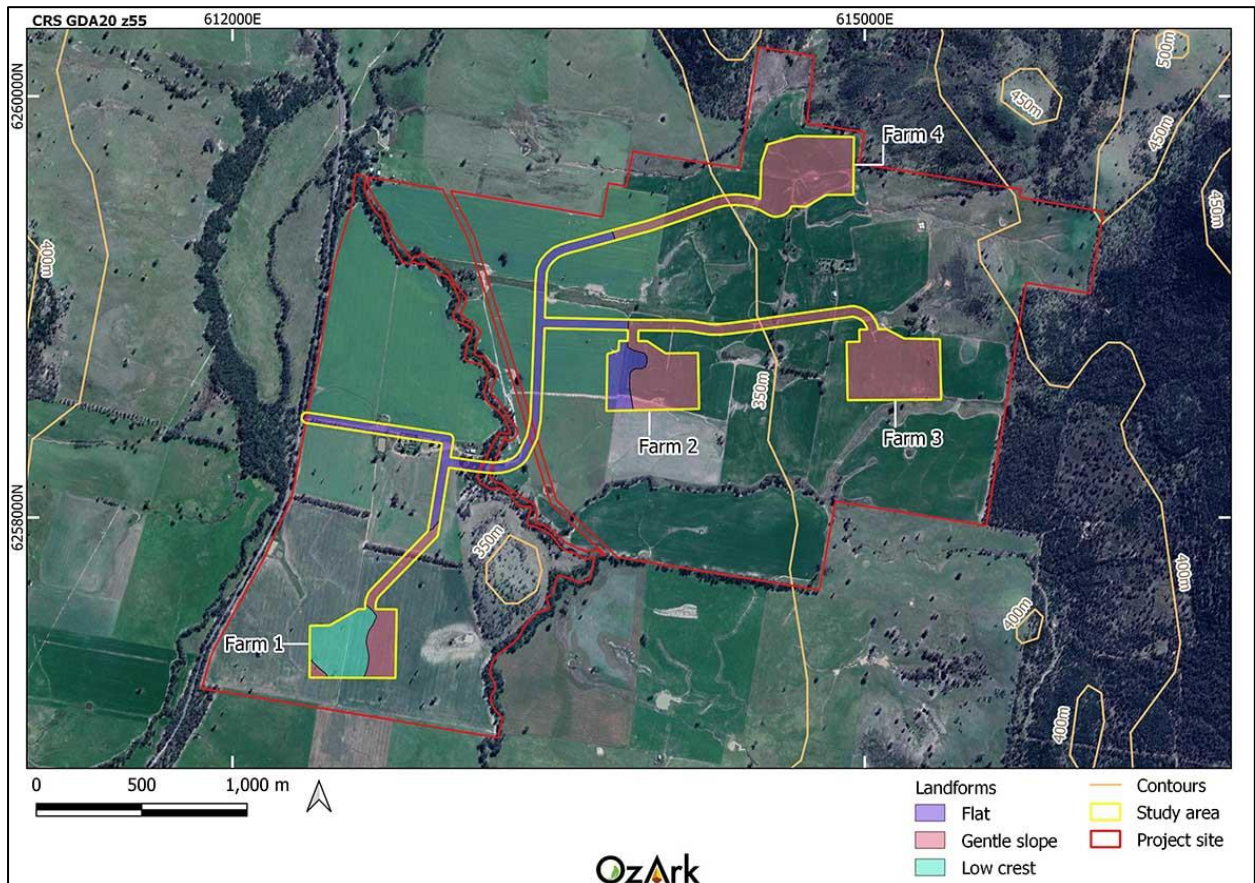
An understanding of the environmental contexts of a study area is requisite in any Aboriginal archaeological investigation (DECCW 2010a). It is a particularly important consideration in the development and implementation of survey strategies for the detection of archaeological sites. In addition, natural geomorphic processes of erosion and/or deposition, as well as humanly activated landscape processes, influence the degree to which these material culture remains are retained in the landscape as archaeological sites; and the degree to which they are preserved, revealed and/or conserved in present environmental settings.

4.1 TOPOGRAPHY

The study area is located approximately in the centre of the NSW South Western Slopes Bioregion. The South Western Slopes Bioregion is a large area of foothills and isolated ranges which comprises the lower inland slopes of the Great Dividing Range and extends from north of Cowra down through southern NSW into western Victoria (NPWS 2003). The study area is specifically in the Lower Slopes Sub-Bioregion. The Lower Slopes Sub-Bioregion is characterised by steep, hilly and undulating ranges, and granite basins as well as occasional basalt caps, confined river valleys and confined river valleys with terrace remnants (NPWS 2003:124).

The topography of the study area is comprised of long, gentle slopes and flat plains. The study area generally slopes from the northeast of the study area at Farms 2 to 4, to the southwest where it becomes flat around Wallah Wallah Creek. A low crest is present at Farm 1 in the southwest of the study area, which then also gently slopes northeast towards Wallah Wallah Creek (**Figure 4-1**).

Figure 4-1: Landforms within the study area.



4.2 GEOLOGY AND SOILS

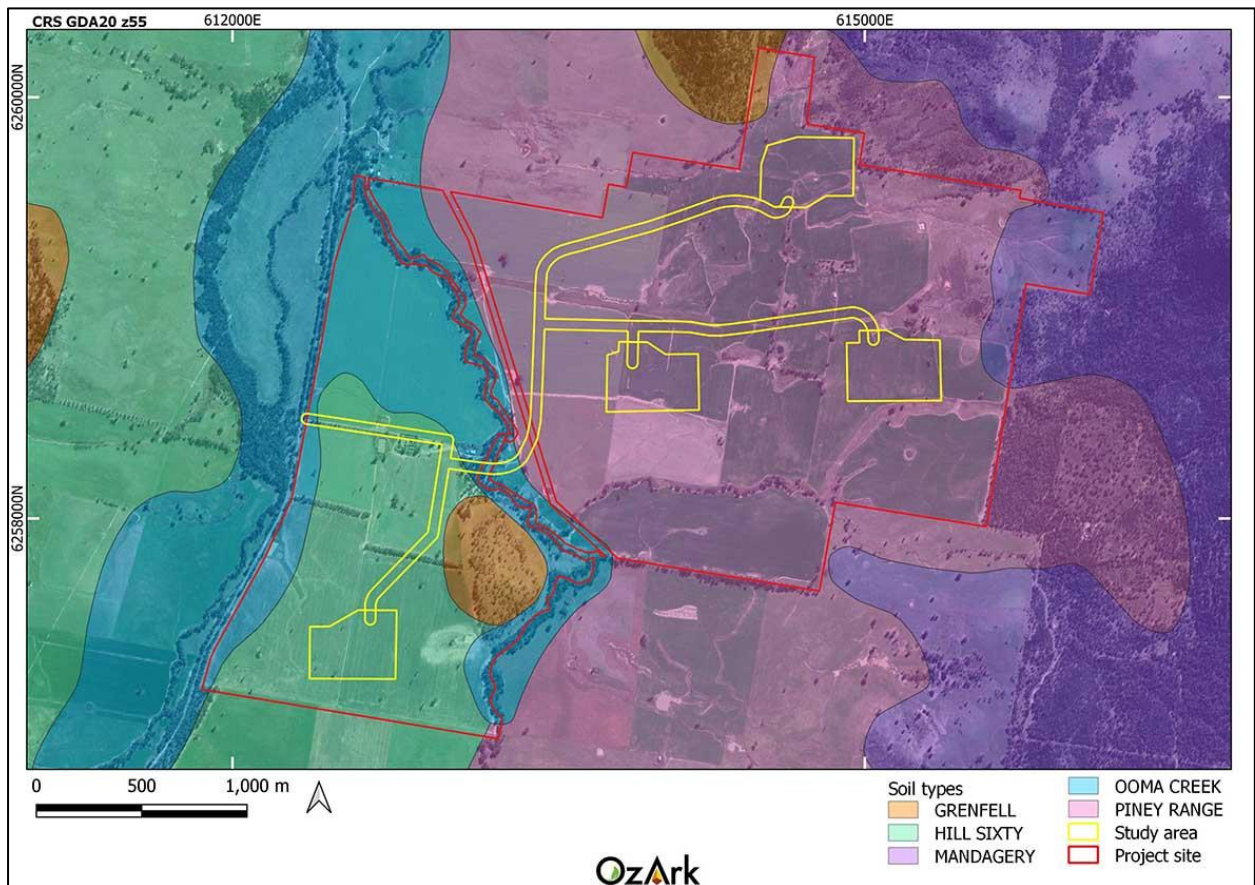
The geology of the South Western Slopes Bioregion in the Weddin Range area has been described by Mitchell (2002: 93–94). In terms of geology the region is described as generally consisting of prominent strike ridges, cliffs, peaks and benched slopes on moderately folded Devonian quartz sandstone, siltstone, and conglomerate (Mitchell 2002: 93–94).

Soil analysis has important ramifications for archaeological research through the potential impact of different soils on human activity (such as agricultural exploitation) and the impact of the soils on archaeological evidence (such as post-depositional movement). The soils known to occur throughout the Survey Boundary are identified here to delineate their nature and impact on the survival and location of archaeological material.

The soils surrounding Wallah Wallah Creek in the central portion of the study area are classified as Ooma Creek Alluvial soils, which are characterised by moderately deep Soloths, with moderately well-drained alluvial sands (**Figure 4-2**). This soil type is prone to seasonal waterlogging and water erosion. The soils in the southwest of the study area are classified as Hill Sixty Transferral soils with well-drained Red Earths being widespread. These soils tend to be prone to localised rock outcrops, are highly acidic, and prone to water erosion. The northeast portion of the study area is classified as Piney Range soils, with dark reddish brown sandy loam

topsoil and reddish-brown clay subsoils. This soil type has a high run-on (i.e. it is easily moved to another location), tends to be relatively shallow, and is prone to water erosion (King 1998).

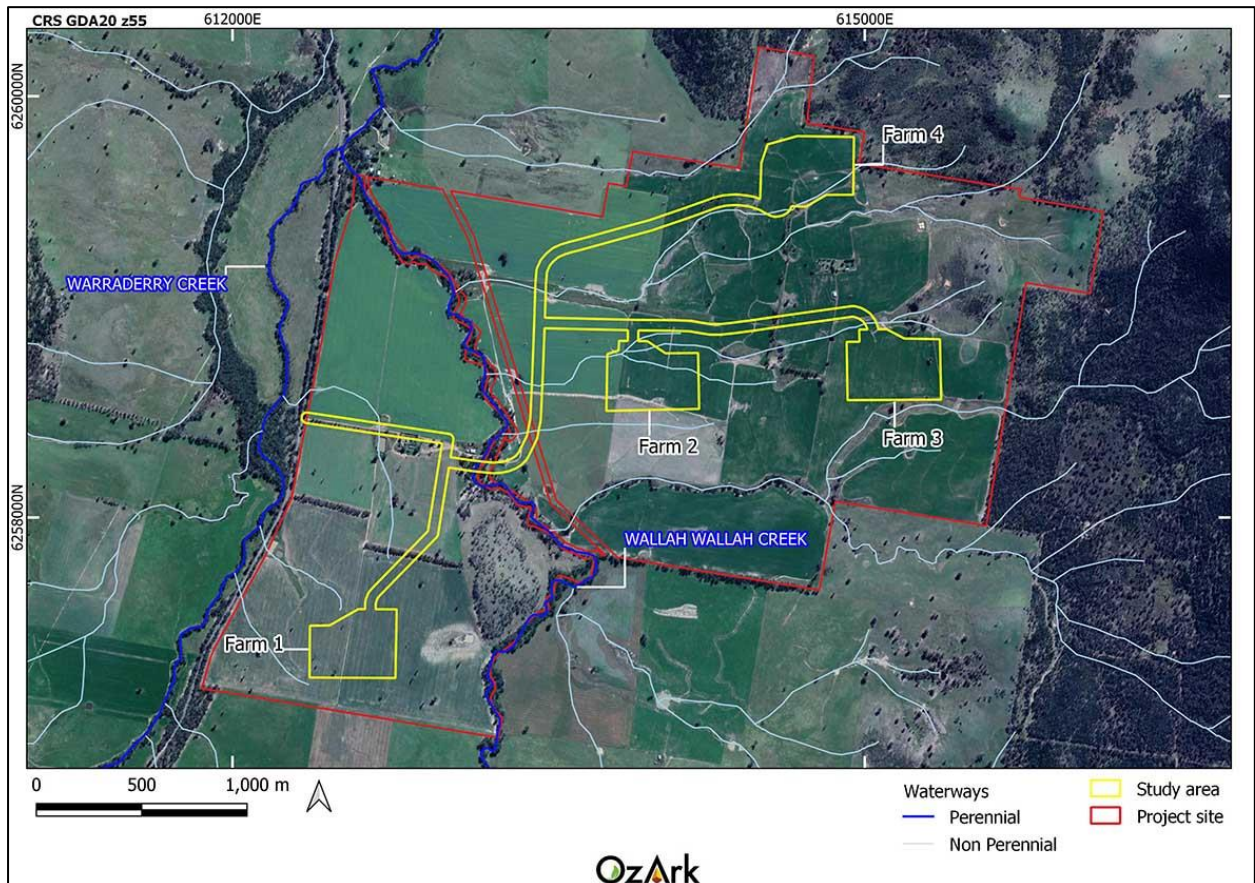
Figure 4-2: Soil types within the study area.



4.3 HYDROLOGY

The study area is situated in the Lachlan water catchment area. The Lachlan River is the primary watercourse of this catchment area and begins in the Great Dividing Range near Gunning and flows approximately 1400 km through western NSW to its junction with the Murrumbidgee River near Oxley. The study area is situated in the undulating landscape of the middle catchment (NSW OoW 2011). The Lachlan River is located approximately 31 km to the northeast of the study area.

Wallah Wallah Creek, a minor, perennial stream intersects the proposed access track in the central/western portion of the study area (**Figure 4-3**). Wallah Wallah flows north, to its confluence with Warraderry Creek, also a minor, perennial stream, located one kilometre to the northwest of the study area. Warraderry Creek flows parallel to the western boundary of the study area. A drainage line of Warraderry Creek intersects part of the proposed access track in the west of the study area, while numerous drainage lines associated with Wallah Wallah Creek intersects parts of the eastern portion of the study area.

Figure 4-3: Waterways within and surrounding the study area.

4.4 VEGETATION

Native vegetation in the study area is highly disturbed due to previous land clearing for agricultural purposes, with most of the study area used for intensive cropping purposes. As such, most of the study area is predominately non-native vegetation with small sections of the access tracks and most of the study area being located on derived grasslands of the South Western Slopes. The riparian corridor along Wallah Wallah Creek is classified as Fuzzy Box Woodland.

4.5 LAND USE HISTORY AND EXISTING LEVELS OF DISTURBANCE

The study area is used for agricultural purposes, primarily grazing and cultivation.

Cultivation acts to redistribute artefacts both horizontally and vertically within the soil profile and ultimately destroys the integrity of artefact assemblages within the top 25 centimetres (cm) of the soil profile. Further, the presence of hooved livestock is likely to have resulted in trampling and compaction of the ground surface which accelerates soil loss. Soil erosion is also accelerated by widespread vegetation clearance which has taken pace across the study area.

4.6 CONCLUSION

The review of the environmental factors associated with the study area allows the following conclusions to be drawn in terms past Aboriginal occupation:

- Topography and hydrology: the flat to gently undulating landforms which dominate the study area would have been hospitable to Aboriginal people, however, apart from Wallah Wallah Creek, there are few areas within the study area which would have encouraged substantial Aboriginal occupation of the landscape.
- Geology and soils: landforms which typically comprise outcropping rock, i.e., hills, are not present within the study area, and therefore sources of stone procurement for tool manufacture will not be present, although localised rocky hills and ridgelines are present in the close surrounds. Soils present on the gentle slopes inside the study area are likely to have been affected by water erosion and are poor draining. The erosional qualities of the soils present will have had an effect on the likelihood for *in situ* archaeological deposits being present. Furthermore, the widespread and comprehensive use of most of the study area for cultivation would have further promoted soil erosion and loss.
- Vegetation: the study area would have once supported an open woodland which would have provided some resources for Aboriginal subsistence in the past. However, resources likely to have supported a large population of people would have been present closer to the banks of more permanent water sources including the Lachlan River. The broad-scale vegetation clearance which has taken place across the study area for agricultural purposes reduces the likelihood that any culturally modified trees remain present; however, should mature native vegetation remain, particularly along Wallah Wallah Creek, culturally modified trees may be present.
- Land use: ground surface disturbances such as vegetation clearance, cultivation, and grazing exist throughout the study area. These activities may have displaced Aboriginal objects and are likely to have reduced the potential for subsurface archaeological material. However, disturbance at a given location does not necessarily mean that there will be no cultural material present, as often a disturbed context will reveal objects which may have previously been subsurface. As noted above, initial vegetation clearing would also have significantly reduced the likelihood of culturally modified trees remaining.

5 ABORIGINAL ARCHAEOLOGY BACKGROUND

5.1 ETHNO-HISTORIC SOURCES OF REGIONAL ABORIGINAL CULTURE

The study area is within the territory of the people belonging to the *Wiradjuri* tribal and linguistic group (Tindale 1974). The Wiradjuri people referred to the Lachlan River as Galiyarr (Kass 2003). The Wiradjuri tribal area is situated within the Murray-Darling Basin, covering three primary physiographic divisions (White 1986):

- The riverine plains in the west
- The transitional western slopes in between
- The highlands or central tablelands in the east.

The study area falls within the central division, being the transitional western slopes into the central tablelands, the heart of Wiradjuri territory.

Episodes of early contact between Indigenous and European cultures from the Lachlan Valley were documented by the explorers Oxley and Cunningham in May 1817. Oxley (1817) noted that whilst traces of Aboriginal inhabitants were identified east of Forbes, no individuals were encountered until the expedition had passed west of Forbes. Oxley (1817) writes:

About a mile from this place, we fell in with a small tribe of natives, consisting of eight men; their women we did not see. They did not appear any way alarmed at the sight of us, but came boldly up: they were covered with cloaks made from opossum skins; their faces daubed with a red and yellow pigment, with neatly worked nets bound round their hair: the front tooth in the upper row was wanting in them all: they were unarmed, having nothing with them but their stone hatchets. It appeared from their conduct that they had either seen or heard of white people before, and were anxious to depart, accompanying the motion of going with a wave of their hand (Whitehead 2003: 105).

Cunningham (1817) reported:

Calling to one another we were answered by strange voices, which left us in no doubt of natives being near us. It was a great point we should all join in again, which at length we did, after some time had passed over several miles on a cross-course, the labour of which might have been saved. Our people came up with seven or eight of the natives, who were clothed in mantles of skin reddened with a pigment from the river. There appeared not the most distant symptoms of hostility among them! They evidently had seen a horse before, and could pronounce some words in English, such as bread, and they had every appearance of having been with those at the Lachlan depot, from which we are now 54 miles west. From the columns of smoke ascending from the trees to which these harmless beings were advancing there is no doubts of their encampment being there situated, and

it might be inferred that their gins or wives were there, from their evident objection to our people attempting to accompany them to their fires. The delay and loss of time occasioned by the above adventure had allowed our boatmen to work themselves through all the numerous windings of the river and overtake us (Whitehead 2003: 105).

Ethnographic information about the Lachlan Wiradjuri gleaned from these expeditions indicates that they appeared largely unconcerned about the presence of the white explorers, and indeed were familiar with European people; however, it is clear from Cunningham's report that the Aboriginal men were protective of their women and children.

As in most parts of NSW, white diseases were a precursor to colonial settlement, and this was already having an impact on the population encountered by early settlers. By the 1820s, tales of white settlement include stories of clashes including massacres of the natives and revenge attacks. The colonial authorities formed military outposts at Bathurst and Wellington, and defensive homesteads became a characteristic of white settlement west of the Blue Mountains. Throughout the following decades, significant numbers of Aboriginal people continued to follow a traditional lifestyle on the Lachlan plains; with the expansion of agriculture and pastoralism; however, many traditional practices became increasingly difficult. The establishment of reserves and missions from the 1890s emphasised the segregation of Aboriginal and non-Aboriginal communities and exacerbated poverty and lack of access to services. However, it also enabled Wiradjuri families to remain intact and develop a sense of identity and resilience (Kass 2003).

5.2 REGIONAL ARCHAEOLOGICAL CONTEXT

There are several of broad scale regional archaeological studies or development driven studies which are in general region of the study area. These studies have been summarised below.

5.2.1 Witter 1992

Witter (1992) undertook research for his PhD thesis in the Upper Lachlan River area to the southeast of the current study area near Cowra. The focus was the economies of the prehistoric riverine groups who inhabited the region. His results provide a framework for the interpretation of the local archaeology including the following contextual points:

- Campsites and stone tool assemblages of the Cowra–Lachlan River area tend to reflect occupation patterns consistent with the broader tablelands region
- Artefact assemblages of the area include components of the Core and Flake tradition dating to c. 12,000-14,000 years before present
- Quartz was the predominant raw material utilised in the region
- Occupation sites tend to occur most frequently along perennial watercourses, springs, and soaks.

5.2.2 Appleton 1993

Appleton (1993) completed an archaeological assessment of five optic cable routes in the Grenfell region. The closest assessment area to the current study area was the Grenfell to Ooma route, located 11 km west of the study area. This route was 31.5 km long and followed Henry Lawson Way. The topography consisted mostly of flat plains intersected by numerous ephemeral waterways and gullies. Two sites were identified along the route, including an isolated find and a low-density artefact scatter. The isolated find was a broken chert flake located along Ooma Creek. The artefact scatter included 15 artefacts along a 290 m stretch of Ooma Creek and included artefacts manufactured predominately from chert.

5.2.3 Kelton Developmental Driven Reports in Forbes Region from 1994–1996

During the 1990s, Kelton (1994a, 1994b, 1995a, 1995b, and 1996) recorded at least 14 scarred trees, five isolated finds and two open sites associated with gilgai landforms. As a result of these studies, Kelton postulated that scarred trees were commonly located within road corridors and public lands because Aboriginal people were restricted to such areas during the historical period (Kelton 1996¹). One of these studies by Kelton (1995a) was an assessment for the Anglesey Rural subdivision located at Cowra, approximately 40 km east of the study area. During the survey, Kelton (1995a) recorded six Aboriginal sites: two artefact scatters and four isolated finds. The artefacts consisted of yellow/brown chert flakes, silcrete, and quartz. The flaked artefacts had evidence of retouch, crushing, striking platforms, negative scars, and bulbs of percussion. Kelton also recorded small termite nest hearth stones at one of the artefact scatters. Kelton concluded that the sites recorded during the survey reflected occasional occupation (1995a: 17).

5.2.4 Oakley 1997

In 1997, Oakley completed a heritage assessment for the two optic fibre cable routes. One alignment extended from 3 km through Forbes to the New Grenfell Road and the other extended for 20 km along Henry Lawson Way towards Grenfell. Three Aboriginal sites were identified during the survey along Henry Lawson Way. This included two scarred trees and a low-density artefact scatter. The artefact scatter was recorded within an exposure adjacent to Ooma Creek and consisted of 10 artefacts. Artefacts included flakes manufactured from silcrete, quartz, fine-grained siliceous stone, and volcanic materials.

5.2.5 Knight 2001

Knight (2001) undertook research for a Masters thesis on the Weddin Mountains and surrounding areas, located 21 km to the southwest of the study area. Knight completed surveys across the areas

¹ While OzArk notes Kelton's observation, the fact that scarred trees are recorded in road corridors and public land probably has more to do with the fact that this is where remnant vegetation has survived.

over several months in 1996 and 1997. The assessment area was divided into four quadrants surrounding the Weddin Mountains, including:

- NW – land northwest of Weddin, including the Wah Way Plain, the gilgai around Caragabal, rolling to hilly land south of the Wheoga Range and the Garema Plain to the north
- SW – the southern half of The Levels, land dominated by Curraburrama and Eurabba Plains and their creek systems including lower Burrangong, Bribbaree and the middle reaches of the Bland, and Weedallion Mountain
- NE – plains adjacent to Ooma Creek, the Bogolong Hills and the rolling terrain around Grenfell
- SE – rolling to hilly terrain to the north and northeast of Young, the plains along the middle reaches of Burrangong Creek and Tyagong Creek and the Bribbaree Hills.

A total of 221 Aboriginal sites were recorded. The site types and quadrants within which they were identified are shown in **Table 5-1**.

Table 5-1: Number of sites recorded in relation to the survey quadrants.

Survey quadrant	Isolated finds	Artefact scatters	Shelters with artefacts	Stone arrangements	Scarred trees	Total
NW	20	38	0	0	7	65
SW	9	18	0	0	1	28
NE	4	21	0	0	2	27
SE	0	13	0	0	0	13
Weddin Mountains	17	67	3	1	0	88
Total	50	157	3	1	10	221

Findings from the Knight's assessment are as follows:

- Weddin Mountains:
 - 77% of sites were identified on the flanks of the mountains with only 23% recorded within mountain landscapes
 - Artefact scatters ranged in size from two to 200 artefacts. Most sites comprised approximately 12 artefacts
 - The largest site (WW8) was located on an elevated landform between Basin Gully and Black Gin Gully
 - Dominate materials included quartz, chert, and volcanics. Other raw material types included silcrete, quartzite, and indurated mudstone
 - All sites were identified within 500 m of a potential water sources.
- Surrounding Slopes and Plains (NW, SW, NE and SE quadrants):
 - 50% of sites were recorded in the NW quadrant

- Scarred trees were recorded almost exclusively on the plains of the NW quadrant
- Artefact scatters ranged in size from 2 to 149 artefacts. Scatters on average comprised 15 artefacts and the average site area is 150 square metres.

5.2.6 OzArk 2015

OzArk (2015) completed an archaeological assessment on the Mid Western Highway within the Weddin, Cowra, and Blayney LGAs. Area 1 extended from Blayney to Cowra; Area 2 extended from Cowra to Grenfell, and Area 3 extended from Grenfell to the Newell Highway. Areas 2 and 3, closest to the study area, were comprised of gently undulating to flat landforms. Three Aboriginal sites were identified during the survey, all in Area 3. Sites included two scarred trees and an artefact scatter with an associated scarred tree. The artefact scatter consisted of two flakes manufactured from a volcanic material and was located along a drainage line of Carabagal Creek.

5.2.7 OzArk 2016

OzArk was engaged by the Central West Local Land Services (CWLLS) to formulate and test a predictive model for Aboriginal site location within Travelling Stock Reserves (TSRs) across the CWLLS area (OzArk 2016). The current study area is in the southern portion of the CWLLS area.

In formulating a predictive model for site location, Mitchell (2002) landscapes were used by OzArk to understand the underlying landform type. Landscapes were divided into the following types:

- Channels and Floodplains
- Alluvial Plains
- Slopes
- Plateaus
- Uplands
- Downs.

OzArk (2016) also divided the CWLLS area into two stream orders—major watercourses (normally named rivers) and minor watercourses (normally named creeks and their larger tributaries)—and buffers were established for each watercourse type as follows:

- Drainage 1 buffer: 200 m either side of a major watercourse
- Drainage 2 buffer: 100 m either side of a minor watercourse.

The OzArk (2016) CWLLS predictive model made predictions based on the landscape type and distance to watercourses. The predictive model was tested by assessing 32 TSRs within the CWLLS area located in a variety of landscape types with variable distances to water.

As a result of the assessment, 59 sites were recorded, including twenty-six modified trees (44%), 22 artefact scatters (37%) and 11 isolated finds (19%).

Table 5-2 demonstrates that the most archaeologically sensitive landscape in the CWLLS area is Channels and Floodplains recording 36 sites of 61% of all sites, followed by Slopes landscapes recording 14 sites or 23% and Alluvial Plains recording six sites. Other landscape types have a low representation but demonstrate that low densities of sites exist in other landscape types.

Table 5-2: Association of all recorded sites to landscape units (OzArk 2016).

Landscape unit	Number of sites	Percentage of total (n=59)
Channels and Floodplains	36	61
Alluvial Plains	6	10
Slopes	14	23
Downs	1	2
Uplands	2	4
Plateau	0	0
Total	59	100

Site types associated with the landscapes most-frequently recording sites (Channels and Floodplains and Slopes) are shown in **Table 5-3**. **Table 5-3** shows that Channels and Floodplains landscapes are more likely to contain modified trees and that Slopes and Alluvial Plains landscapes are more likely to contain artefact scatters and isolated finds.

Table 5-3: Frequency of site types in association with the Channels and Floodplains, Slopes and Alluvial Plains landscape types (OzArk 2016).

Site type	Channels and Floodplains	Slopes	Alluvial Plains
Artefact scatter	11 (30.5%)	7 (50%)	3 (50%)
Isolated finds	4 (11%)	3 (21%)	3 (50%)
Modified trees	21 (58.5%)	4 (29%)	0 (0%)
Total	36	14	10

Of the recorded sites, 27 sites (or 46% of all sites) were recorded with the Drainage 1 buffer and 10 sites (or 17% of all sites) were recorded within the Drainage 2 buffer. Therefore, more than 63% of all sites were recorded within the two drainage buffers, with a clear bias toward Drainage 1 buffers.

5.3 LOCAL ARCHAEOLOGICAL CONTEXT

5.3.1 Desktop database searches conducted

A desktop search was conducted on the following databases to identify any potential previously recorded heritage within the study area. The results of this search are summarised in **Table 5-4** and presented in detail in **Appendix 2**.

Table 5-4: Aboriginal cultural heritage: desktop-database search results.

Name of Database Searched	Date of Search	Type of Search	Comment
Commonwealth Heritage Listings	9 July 2021	Weddin LGA	No places listed on either the National or Commonwealth heritage lists are located within the study area.
National Native Title Claims Search	9 July 2021	NSW	No Native Title Claims cover the study area.
AHIMS	9 July 2021	20 x 20 km centred on the study area	47 sites returned within the designated search area. None of these sites are within the study area.
LEP	9 July 2021	Weddin LEP of 2011	None of the Aboriginal places noted occur near the study area.

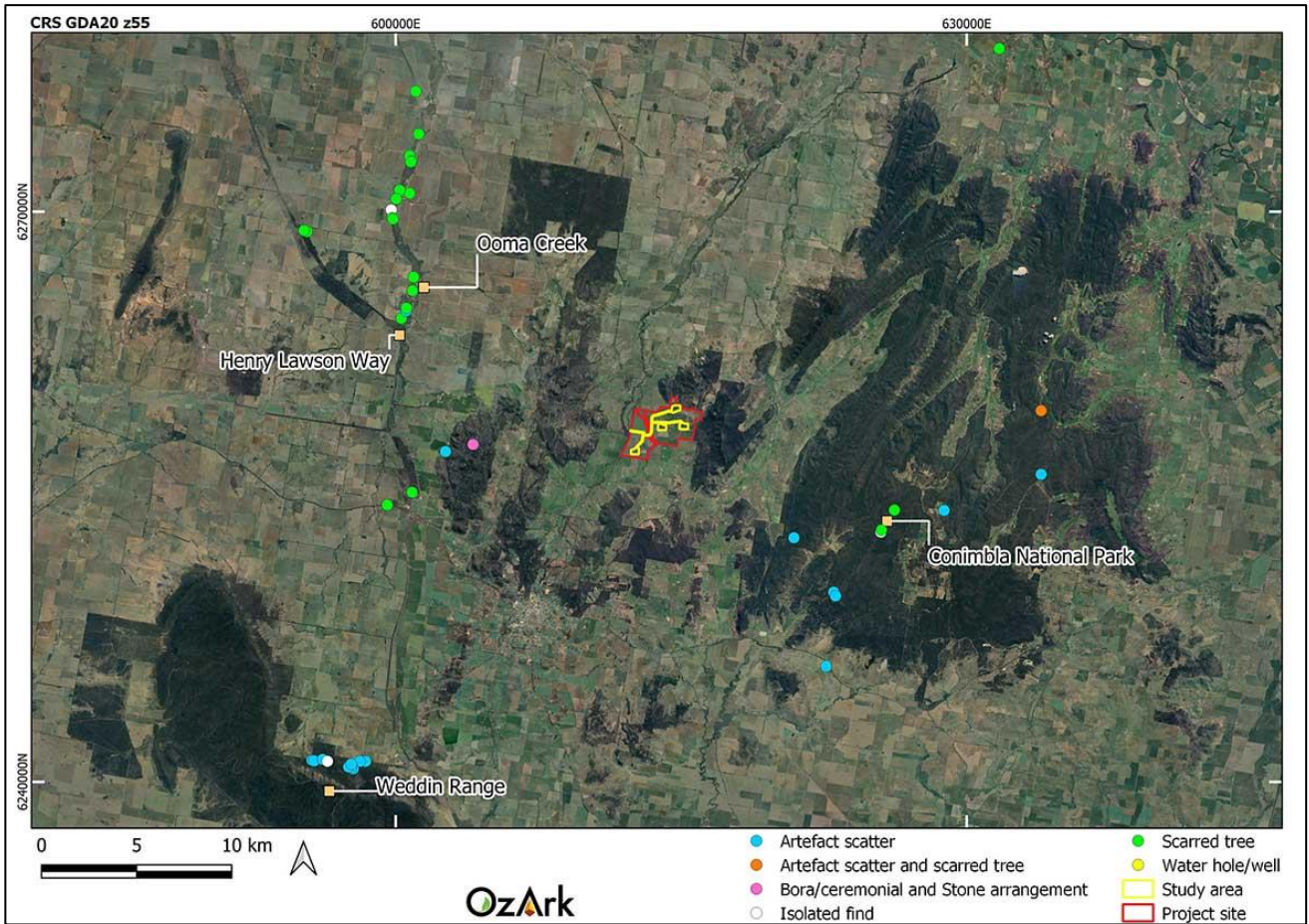
A search of the Heritage NSW administered AHIMS database on 9 July 2021 returned 47 results for Aboriginal sites within a 40 km by 40 km area centred over the study area (GDA Zone 55 Eastings: 593972–633972; Northings: 6238809–6278809) (see **Table 5-5** for site types and frequencies). **Figure 5-1** shows the location of the AHIMS sites in relation to the study area.

Table 5-5: AHIMS site types and frequencies.

Site Type	Number	% Frequency
Scarred trees	24	51%
Artefact scatter	17	36%
Isolated find	3	6%
Artefact scatter and scarred tree	1	2%
Bora/ceremonial and stone arrangement	1	2%
Water hole/well	1	2%
Total	47	100

The most frequently recorded site type is scarred trees contributing to 51% of the sites within the search area (**Table 5-5**). Other site types include artefact scatters (36%) and isolated finds (6%), with artefact scatter and scarred tree, Bora/ceremonial site and stone arrangement, and a waterhole/well site also present, but in much lower frequencies (2% for each). Scarred trees returned in the AHIMS search have predominately been recorded on gently sloping to flat landforms. Most scarred trees are located within the road corridor and reserves along Henry Lawson Drive, which is parallel to Ooma Creek, a perennial stream (**Figure 5-1**). Artefact scatters have more commonly been recorded in the footslopes and spurs of ridgelines associated with Weddin Range and ridgelines within Conimbla National Park, although some low-density artefact scatters and isolated finds have been recorded on the plains along Ooma Creek.

Figure 5-1: AHIMS sites in relation to the study area.



5.4 PREDICTIVE MODEL FOR SITE LOCATION

Across Australia, numerous archaeological studies in widely varying environmental zones and contexts have demonstrated a high correlation between the permanence of a water source and the permanence and/or complexity of Aboriginal occupation. Site location is also affected by the availability of and/or accessibility to a range of other natural resources including: plant and animal foods; stone and ochre resources and rock shelters; as well as by their general proximity to other sites/places of cultural/mythological significance. Consequently, sites tend to be found along permanent and ephemeral water sources, along access or trade routes or in areas that have good flora/fauna resources and appropriate shelter.

In formulating a predictive model for Aboriginal archaeological site location within any landscape it is also necessary to consider post-depositional influences on Aboriginal material culture. In all but the best preservation conditions very little of the organic material culture remains of ancestral Aboriginal communities survives to the present. Generally, it is the more durable materials such as stone artefacts, stone hearths, shells, and some bones that remain preserved in the current landscape. Even these, however, may not be found in their original depositional context since these may be subject to either (a) the effects of wind and water erosion/transport—both over short- and long-time scales—or (b) the historical impacts associated with the introduction of European farming practices including grazing and cropping, land degradation, and farm related infrastructure. Scarred trees, due to their nature, may survive for up to several hundred years but rarely beyond.

5.4.1 Landform modelling of archaeological potential

Previous archaeological studies undertaken within the vicinity of the study area provides information to obtain a sound understanding of the nature and distribution of archaeological sites within the regional area.

A consideration of the landforms within the study area enables a prediction regarding the type and distribution of sites to be made. As the study area consists of gentle slopes and flat plains, previous findings indicate that culturally modified trees would be the most common site type to be present (Kelton 1996 and Knight 2001). Across these landforms, culturally modified trees are more likely to be located closer to substantial watercourses and drainage lines, such as Wallah Wallah Creek; however, as noted by Kelton (1996), they can be recorded over almost all landform units, even those distant from water. While the regional archaeological context indicates that culturally modified trees are the most likely site type to be present based on the landforms present, the likelihood of this site type remaining extant across the landforms of the study area is substantially reduced by vegetation clearance.

The regional context also indicates that larger, more complex artefact scatters are most likely to occur in the footslopes and spurs of ridgelines or along perennial water sources, such as the Lachlan River (Witter 1992 and Knight 2001). Low-density artefact scatters with lower complexity are more likely to be associated with more minor, perennial and non-perennial water sources across the gentle slopes and plains such as those present across the study area. As such, low-density artefact scatters are most likely to be identified within 100 m of Wallah Wallah Creek (OzArk 2016). This site type is likely to be in a secondary context if identified within the study area as it has been previously cultivated and therefore have very low integrity.

5.4.2 Conclusion

Based on knowledge of the environmental contexts of the study area and a desktop review of the known local and regional archaeological record, the following predictions are made concerning the probability of those site types being recorded within the study area:

Isolated finds may be indicative of random loss or deliberate discard of a single artefact, the remnant of a now dispersed and disturbed artefact scatter, or an otherwise obscured or sub-surface artefact scatter. They may occur anywhere within the landscape but are more likely to occur in topographies where open artefact scatters typically occur.

- Applicability to the study area: As isolated finds can occur anywhere, particularly within disturbed contexts, it is predicted that this site type could be recorded within the study area. It is noted in **Section 0** that isolated finds have been recorded in the region, although at a low rate.

Open artefact scatters are defined as two or more artefacts, not located within a rock shelter, and located no more than 50 m away from any other constituent artefact. This site type may occur almost anywhere that Aboriginal people have travelled and may be associated with hunting and gathering activities, short- or long-term camps, and the manufacture and maintenance of stone tools. Artefact scatters typically consist of surface scatters or sub-surface distributions of flaked stone discarded during the manufacture of tools but may also include other artefactual rock types such as hearth and anvil stones. Less commonly, artefact scatters may include archaeological stratigraphic features such as hearths and artefact concentrations which relate to activity areas. Artefact density can vary considerably between and across individual sites. Small ground exposures revealing low density scatters may be indicative of a background scatter rather than a spatially or temporally distinct artefact assemblage. These sites are classed as 'open', that is, occurring on the land surface unprotected by rock overhangs, and are sometimes referred to as 'open camp sites'.

Artefact scatters are most likely to occur on level or low gradient contexts, along the crests of ridgelines and spurs, and elevated areas fringing watercourses or wetlands. Larger sites may be expected in association with permanent water sources.

Topographies which afford effective through-access across, and relative to, the surrounding landscape, such as the open basal valley slopes and the valleys of creeks, will tend to contain more and larger sites, mostly camp sites evidenced by open artefact scatters.

- Applicability to the study area: Artefact distributions of variable artefact densities have been recorded in the region (see **Section 0**). Artefact scatters in the region have generally been recorded along named creek lines or on the footslopes and spurs of ridgelines. Within the study area, artefact scatters are most likely to be located within 100 m of Wallah Wallah Creek. Any artefact scatters are likely to be of low-density and comprised of artefacts manufactured predominately from quartz, chert, and volcanic materials.

Aboriginal scarred trees contain evidence of the removal of bark (and sometimes wood) in the past by Aboriginal people, in the form of a scar. Bark was removed from trees for a wide range of reasons. It was a raw material used in the manufacture of various tools, vessels and commodities such as string, water containers, roofing for shelters, shields and canoes. Bark was also removed because of gathering food, such as collecting wood boring grubs or creating footholds to climb a tree for possum hunting. Due to the multiplicity of uses and the continuous process of occlusion (or healing) following removal, it is difficult to accurately determine the intended purpose for any example of bark removal. Scarred trees may occur anywhere old growth trees survive. The identification of scars as Aboriginal cultural heritage items can be problematical because some forms of natural trauma and European bark extraction create similar scars. Many remaining scarred trees probably date to the historic period when bark was removed by Aboriginal people for both their own purposes and for roofing on early European houses. Consequently, the distinction between European and Aboriginal scarred trees may not be clear.

- Applicability to the study area: Scarred trees are the most recorded site type within 40 km of the study area, accounting for 51% of the recorded site types (**Table 5-5**). Scarred trees in this area are generally located on the plains or gently sloping landforms such as those within the study area. However, this site type is unlikely to be identified within the study area as it has been cleared for grazing and farming activities. Should this site type be recorded, it will most likely be along the riparian corridor of Wallah Wallah Creek, if trees of a sufficient age remain.

Burials are generally found in soft sediments such as aeolian sand, alluvial silts and rock shelter deposits. In valley floor and plains contexts, burials may occur in locally elevated topographies rather than poorly drained sedimentary contexts. Burials are also known to have occurred on rocky hilltops in some limited areas. Burials are generally only visible where there has been some disturbance of sub-surface sediments or where some erosional process has exposed them.

- Applicability to the study area: Burials are generally found in elevated sandy contexts or in association with rivers and major creeks. No such landforms exist with the study area and therefore such sites are unlikely to occur.

Bora/Ceremonial sites are places which have ceremonial or spiritual connections. Ceremonial sites may comprise of natural landscapes or have archaeological material. Bora sites are ceremonial sites which consist of a cleared area and earthen rings.

- Applicability to the study area: This site type is generally identified through consultation with the Aboriginal community rather than through archaeological evidence. The distribution of ceremonial sites and Bora grounds across the landscape is somewhat unpredictable as the choice of their location appears to be based on spiritual reasons rather than simply landscape features and resources. One Bora/ceremonial site is recorded 8.2 km to the west of the study area in the Bogolong Hills (**Section 0**).

5.5 RESEARCH QUESTIONS

Several research questions can meaningfully be applied to the investigation of the study area.

These research questions include:

- What resources were available to the Aboriginal people using the land within the study area (food, stone, and water) and what resources were transported to the area?
- How do the raw materials recorded within the study area compare to those in recorded in the surrounding region?
- Establish how the findings within the study area (if any) accord with the regional archaeological context examined in **Section 5.2**.

6 RESULTS OF ABORIGINAL ARCHAEOLOGICAL ASSESSMENT

6.1 SAMPLING STRATEGY AND FIELD METHODS

The archaeological methods utilised in the Aboriginal archaeological assessment followed the Code of Practice. Standard archaeological field survey and recording methods were employed (Burke and Smith 2004).

It should be noted that the aim of any archaeological survey is not to locate each artefact in a landscape but to undertake investigations so that the archaeological potential and archaeological characteristics of all landforms within the study area are known. Therefore, the aims of the survey were to:

- Conduct pedestrian transects across all landforms in the study area so that their archaeological potential could be determined
- Evaluate whether the predictive model set out in **Section 5.4** is valid
- Determine if any portions of the study area require test excavation to understand the archaeological potential at a particular location.

The study area was assessed by pedestrian transects with surveyors spaced approximately 15 m apart.

6.2 EFFECTIVE SURVEY COVERAGE

Two of the key factors influencing the effectiveness of archaeological survey are ground surface visibility (GSV) and ground surface exposure (GSE). These factors are quantified to ensure that the survey data provides adequate evidence for the evaluation of the archaeological materials across the landscape. For the purposes of the current assessment, these terms are used in accordance with the definitions provided in the Code of Practice.

GSV is defined as:

... the amount of bare ground (or visibility) on the exposures which might reveal artefacts or other archaeological materials. It is important to note that visibility, on its own, is not a reliable indicator of the detectability of buried archaeological material. Things like vegetation, plant or leaf litter, loose sand, stone ground or introduced materials will affect the visibility. Put another way, visibility refers to 'what conceals' (DECCW 2010: 39).

GSE is defined as:

... different to visibility because it estimates the area with a likelihood of revealing buried artefacts or deposits rather than just being an observation of the amount of bare ground. It is the percentage of land for which erosion and exposure was sufficient to reveal

archaeological evidence on the surface of the ground. Put another way, exposure refers to 'what reveals' (DECCW 2010: 37).

Table 6-1 calculates the effective survey coverage within the study area. In general, **Table 6-1** presents an approximation of the amount of ground surface able to be seen at any location within particular survey units and the overall landforms. **Table 6-1** shows that the amount of exposure across the landforms was variable and generally dependent on levels of disturbance and current land use. The greatest amount of exposure and visibility was present in Survey Unit 1, from a combination of ploughing and the presence of an access track.

The location of the Survey Units is shown on **Figure 6-1** and photos illustrating each Survey Unit are shown on **Plate 1** to **Plate 12**.

Table 6-1: Effective survey coverage within the study area.

Survey Unit	Landform	Exposure type	Survey Unit Area (sq m)	Visibility %	Exposure %	Effective Coverage Area (sq m) (= Survey Unit Area x Visibility % x Exposure %)	Effective Coverage % (= Effective Coverage Area / Survey Unit Area x 100)	Plate reference
1	Flat	Access track; plough rows	37,890	90%	70%	23,870	63%	Plate 1
2	Flat	Plough rows	19,787	60%	5%	593	3%	Plate 2
3	Gentle slope	Plough rows; vegetation corridors; fence lines	66,685	60%	10%	4,001	6%	Plate 3
4	Low crest	Plough rows; fence line	75,269	60%	10%	4,516	6%	Plate 4
5	Gentle slope	Plough rows	4,114	60%	5%	123	3%	Plate 5
6	Flat	Erosion scalds; fence lines	16,868	80%	30%	4,048	24%	Plate 6
7	Flat	Plough rows; stock trampling	83,848	60%	15%	7,546	9%	Plate 7
8	Flat	Plough rows	39,978	60%	20%	4,797	12%	Plate 8
9	Gentle slope	Contour banks; erosion gullies	146,996	50%	10%	7,349	5%	Plate 9
10	Gentle slope	Plough rows; dam wall	138,879	70%	50%	48,607	35%	Plate 10
11	Gentle slope	Plough rows; dam wall; fence lines	12,398	60%	30%	2,231	18%	Plate 11
12	Gentle slope	Dam wall; fence lines; erosion scalds; animal tracks	160,536	50%	10%	8,026	5%	Plate 12

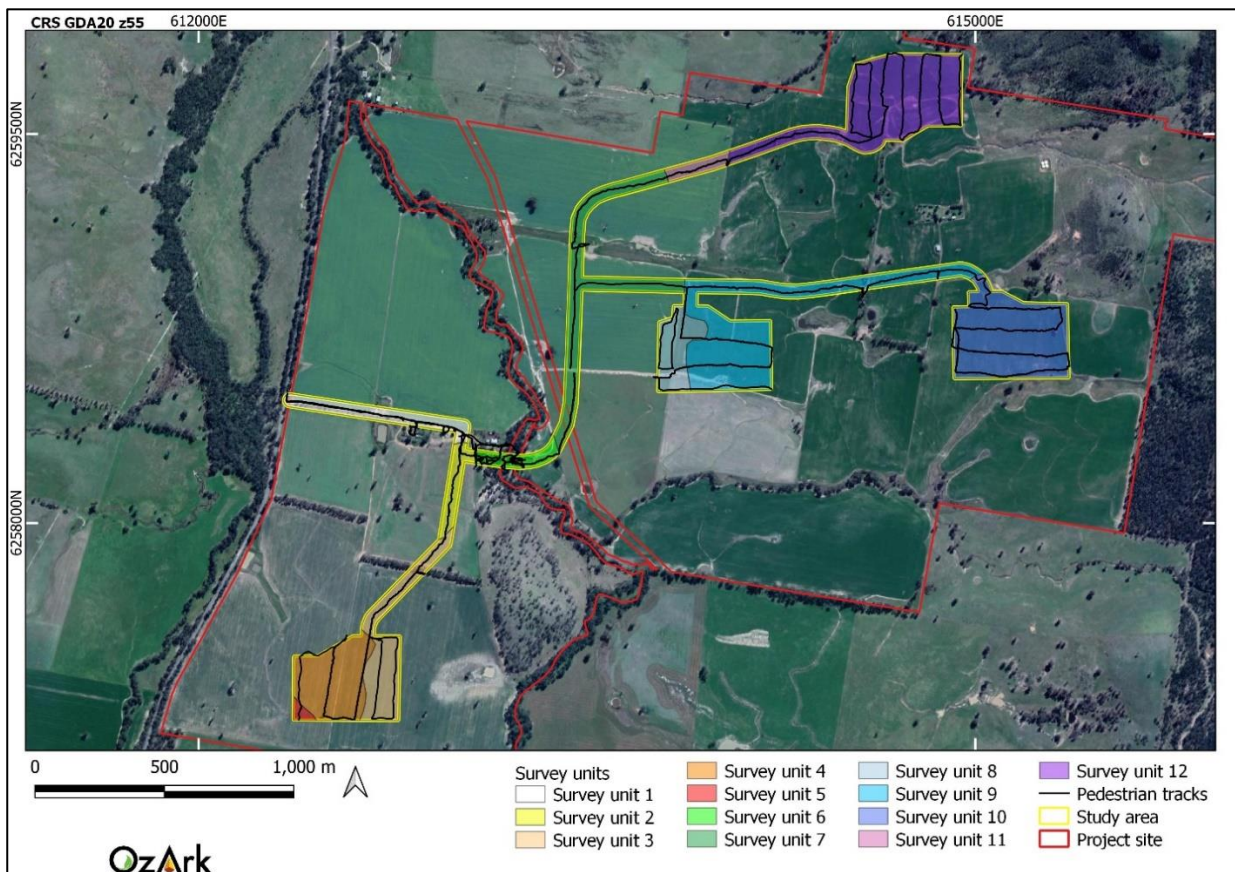
Table 6-2 demonstrates that although the survey efficacy across the three landforms present in the study area was relatively low, between 6–20%, which could contribute the low number of sites recorded. Survey efficacy was greatest in the flat landforms, which was the only landform where a site was recorded. The site was identified in the most archaeologically sensitive area of the study area, on a terrace associated with Wallah Wallah Creek, where sites were considered most likely to be identified. For the remainder of the study area, the assessment has relied upon an examination of the archaeological potential of the landforms. Based on the flat and gently undulating landforms distant from reliable water which dominates the study area, no additional sensitive archaeological landforms were identified during the survey of the study area.

Table 6-2: Effective survey coverage and incidences of site recording.

Landform	Landform area (sq m)	Area Effectively Surveyed (sq m) (= Effective Coverage Area)	% of Landform Effectively Surveyed (= Area Effectively Surveyed / Landform x 100)	Number of sites	Number of artefacts or features
Low crest	75,269	4,516	6%	0	0
Flat	198,371	40,854	20%	1	3
Gentle slope	529,608	70,337	13%	0	0

Figure 6-1 shows the survey tracks of the OzArk archaeologist during the survey across the survey units.

Figure 6-1: Pedestrian coverage across the survey units.



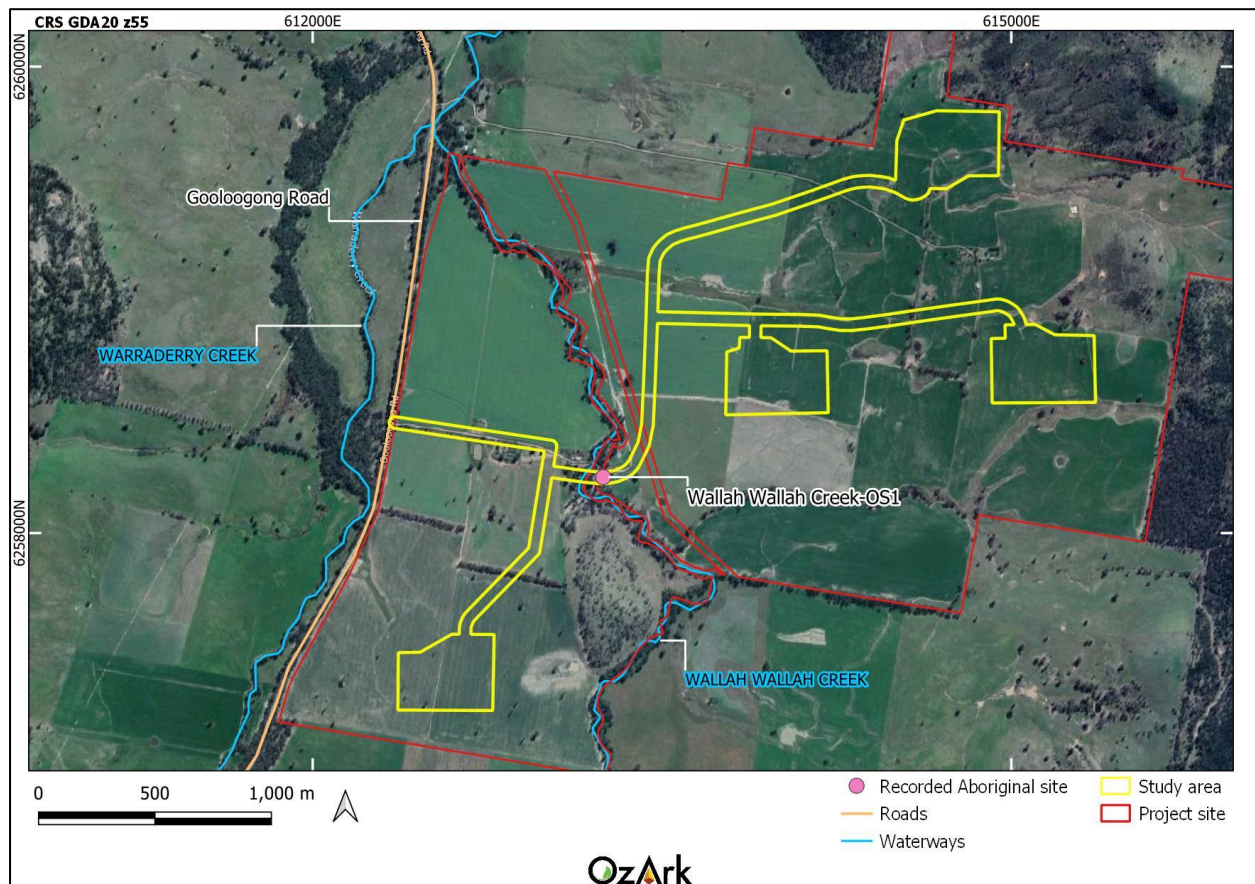
6.3 ABORIGINAL SITES RECORDED

One Aboriginal site, Wallah Wallah Creek-OS1, was recorded during the survey of the study area (Table 6-3 and Figure 6-2). Further details on Wallah Wallah Creek-OS1 follow.

Table 6-3: Aboriginal cultural heritage sites recorded during the survey.

Site Number	Site centroid coordinates	Feature(s)	Survey Unit	Landform
Wallah Wallah Creek-OS1	GDA20 zone 55 613247E 258239N	Artefact scatter with potential archaeological deposit	6	Flat

Figure 6-2: Location of Wallah Wallah Creek-OS1.



Wallah Wallah Creek-OS1

Site type: Artefact scatter with potential archaeological deposit (PAD)

GPS coordinates: GDA20 zone 55 613247E 6258239N

Location of site: Wallah Wallah Creek-OS1 is located within Lot 22 DP866857 on the Summerfield property, approximately 9.4 km north of Grenfell, NSW 2810. The site is located on a terrace to the east of Wallah Wallah Creek, 960 m east of Gooloogong Road (Figure 6-2).

Description of site: Wallah Wallah Creek-OS1 is located on an upper terrace within a cleared paddock currently used for grazing (**Figure 6-3**; image 1 and 2). Three artefacts were recorded at the site along the edge of the terrace (**Figure 6-4**). The artefacts include flakes manufactured from aphanitic basalt (**Figure 6-4**: Location of recorded artefacts and PAD at Wallah Wallah Creek-OS1).

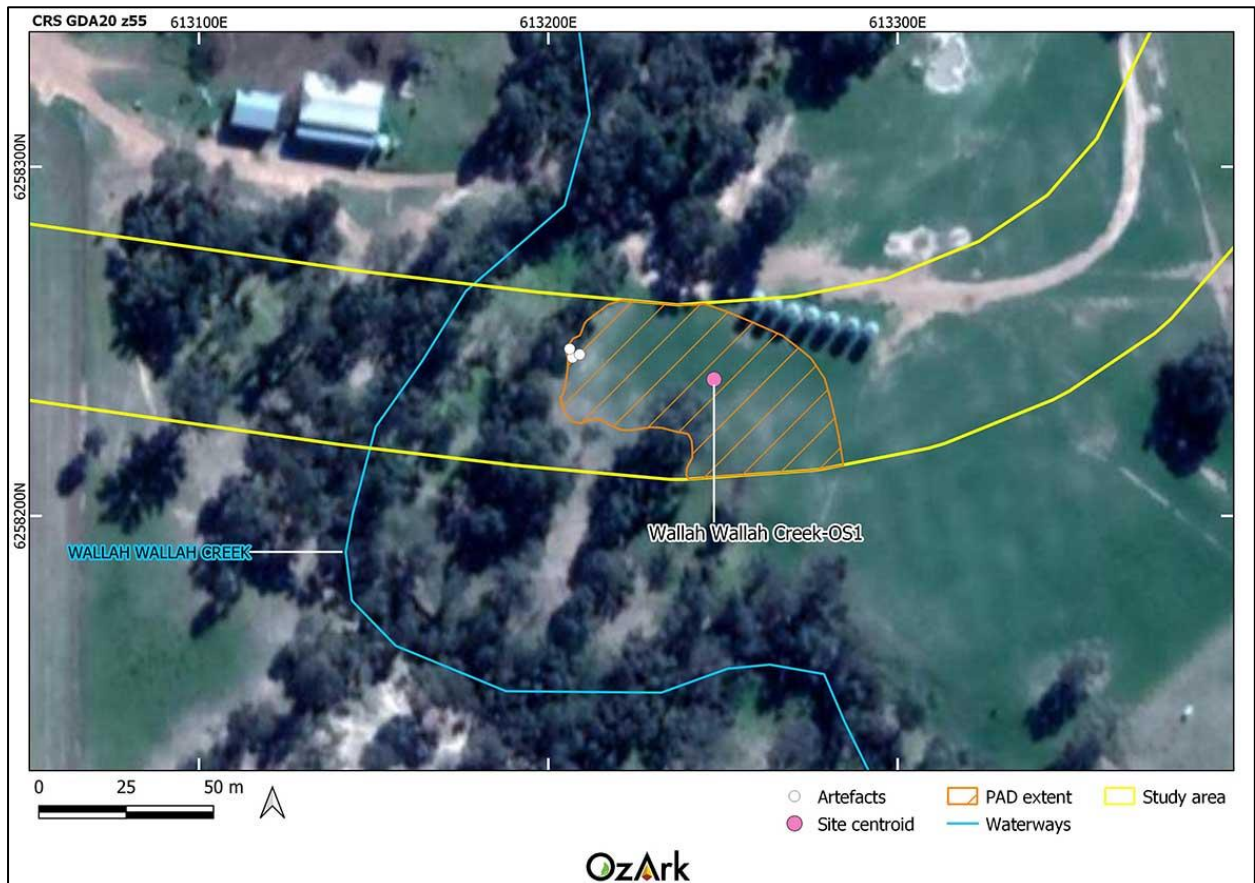


Table 6-4 and **Figure 6-3**; image 3). One of the flakes shows evidence of use wear along the margin.

Based on the landform type and proximity to Wallah Wallah Creek, the site is considered to be associated with PAD (**Figure 6-4**). The PAD extends 75 m (east–west) by 50 m (north–south).

Aerial imagery confirms that the delineated area as PAD has been subject to ploughing in the past and therefore, is not considered to be associated with intact deposits within the top 20–25 cm. Further the deposit is not expected to be greater than 30–40 cm due to the erodibility of the soils present which has been exacerbated by the land use and water wash.

Figure 6-3: Wallah Wallah Creek-OS1. View of site and recorded artefacts.



1. View of the location of artefacts (red circle) at Wallah Wallah Creek OS-1 on the terrace.



2. View east from the edge of the terrace across the area of PAD. Location of the recorded artefacts is shown in the red circle.



3. Wallah Wallah Creek OS-1 artefacts.

Figure 6-4: Location of recorded artefacts and PAD at Wallah Wallah Creek-OS1.



Table 6-4: Wallah Wallah Creek-OS1 artefact attributes.

Artefact type	Material	Integrity	Reduction	Size (L x W x D) mm
Flake	Aphanitic basalt	Complete	Tertiary	60 x 33 x 19
Flake	Aphanitic basalt	Complete	Tertiary	34 x 38 x 15
Flake	Aphanitic basalt	Complete	Tertiary	19 x 14 x 9

6.4 DISCUSSION

The predictions based on landform modelling for the study area concluded that stone artefact sites were the most likely site type to be identified, although the overall incidence of these sites was predicted to be low due to several environmental factors such as the landforms present and distance to reliable water across much of the study area. Should such sites be identified, it was predicted that they would be low-density artefact scatters and/or isolated finds. The results of the current study conform to the predictive model as one low-density artefact scatter was identified, and the site was located within 100 m of a Drainage 1 waterway (**Section 5.2.7**).

Culturally modified trees were noted to be abundant in the region of the study area across similar landforms, but due to historic disturbances associated with vegetation clearing in the study area, it was predicted that this site type would have a low likelihood of occurring. This was borne out by the results of the assessment.

The identification of one low-density artefact scatter within the study area highlights that the limited resources of the study area would likely have supported only sporadic visits in the past. While a perennial stream (Wallah Wallah Creek) intersects the study area, OzArk (2016) found that sites associated with such waterways are generally recorded within 100 m of the stream. Overall, landforms within 100 m of Wallah Wallah Creek account for only 1.25% of the landforms present within the study area. The absence of sites within 100 m to the west of Wallah Wallah Creek is attributed to the lower-lying landform present compared to the eastern side.

6.4.1 Research questions

In **Section 5.5** several research questions were set out that framed the archaeological assessment and the results of the survey are assessed against these questions below.

- What resources were available to the Aboriginal people using the land within the study area (food, stone, and water) and what resources were transported to the area?
 - No specific food resource locations were noted, and water resources were limited to Wallah Wallah Creek. At the time of the survey, water was flowing in the creek following recent rainfall. No outcropping rock materials were identified within the study area. Therefore, the implication is that all the raw material used in the manufacturing of the artefacts at Wallah Wallah Creek-OS1 was transported into the area.
- How do the raw materials recorded within the study area compare to those in recorded in the surrounding region?
 - All three artefacts recorded at Wallah Wallah Creek-OS1 are manufactured from aphanitic basalt, a volcanic material. Volcanics are recorded as being a relatively common material in the region for manufacturing stone tools (Oakley 1997 and Knight 2001).
- Establish how the findings within the study area (if any) accord with the regional archaeological context examined in **Section 5.2**.
 - The findings of the study area accord with the regional archaeological context. Previous assessments indicated that landforms such as flats and gentle slopes distant from reliable water which dominate the study area have lower archaeological potential compared to footslopes and spurs in the surrounding area or landforms immediately adjacent to reliable water. The recording of Wallah Wallah Creek-OS1 within 100 m of a perennial stream is consistent with the findings of OzArk (2016).

7 SIGNIFICANCE ASSESSMENT

7.1 INTRODUCTION TO SIGNIFICANCE ASSESSMENT

7.1.1 Identifying cultural significance

The concept of cultural significance is used in Australian heritage practice and legislation to encompass all the cultural values and meanings that might be recognised in a place. The *Burra Charter's* definition of cultural significance is broad and encompasses places that are significant to Indigenous cultures (Burra Charter 2013).

The *Burra Charter* definition of 'place' is also broad and encompasses Indigenous places of cultural significance. 'Place' includes locations that embody spiritual value (such as Dreaming places, sacred landscapes, and stone arrangements), social and historical value (such as massacre sites), as well as scientific value (such as archaeological sites). In fact, one place may be all these things or may embody all these values at the same time.

In some cases, the find-spot of a single artefact may constitute a 'place'. Equally, a suite of related locations may together comprise a single 'place', such as the many individual elements that make up a Songline. These more complex places are sometimes called a cultural landscape or cultural route.

The Guide (OEH 2011: 8–9) notes that cultural significance is comprised of an assessment of social values, scientific values, aesthetic values, and historic values. These values are described below.

7.1.1.1 *Social or cultural value*

Social or cultural value refers to the spiritual, traditional, historical, or contemporary associations and attachments the place or area has for Aboriginal people. Social or cultural value is how people express their connection with a place and the meaning that place has for them.

Places of social or cultural value have associations with contemporary community identity. These places can have associations with tragic or warmly remembered experiences, periods, or events. Communities can experience a sense of loss should a place of social or cultural value be damaged or destroyed.

There is not always consensus about a place's social or cultural value. Because people experience places and events differently, expressions of social or cultural value do vary and, in some instances, will be in direct conflict. When identifying values, it is not necessary to agree with or acknowledge the validity of each other's values, but it is necessary to document the range of values identified.

Social or cultural value can only be identified through consultation with Aboriginal people. This could involve a range of methodologies, such as cultural mapping, oral histories, archival

documentation, and specific information provided by Aboriginal people specifically for the investigation.

Cultural value involves both traditional links with specific areas, as well as an overall concern by Aboriginal people for their sites generally and the continued protection of these. This type of value may not be in accord with interpretations made by the archaeologist: a site may have low archaeological value but high social value, or vice versa.

7.1.1.2 Scientific (archaeological) value

This refers to the importance of a landscape, area, place or object because of its rarity, representativeness, and the extent to which it may contribute to further understanding and information (Burra Charter 2013).

Assessing a site in this context involves placing it into a broader regional framework, as well as assessing the site's individual merits in view of current archaeological discourse. This type of value relates to the ability of a site to answer current research questions and is also based on a site's condition (integrity), content and representativeness.

The overriding aim of cultural heritage management is to preserve a representative sample of the archaeological resource. This will ensure that future research within the discipline can be based on a valid sample of the past. Establishing whether a site can contribute to current research also involves defining 'research potential'. Questions regularly asked when determining significance are: can this site contribute information that no other site can? Is this site representative of other sites in the region?

Information about scientific values will be gathered through any archaeological investigation undertaken. Archaeological investigations must be carried out according to Heritage NSW's Code of Practice (DECCW 2010a).

Often scientific values are informed by social values that allow a contemporary understanding of the archaeological data to be understood.

7.1.1.3 Aesthetic value

This refers to the sensory, scenic, architectural, and creative aspects of the place. It is often closely linked with the social values. It may consider form, scale, colour, texture and material of the fabric or landscape, and the smell and sounds associated with the place and its use (Burra Charter 2013).

7.1.1.4 Historic value

Historic value refers to the associations of a place with a historically important person, event, phase, or activity in an Aboriginal community. Historic places do not always have physical

evidence of their historical importance (such as structures, planted vegetation or landscape modifications). They may have 'shared' historic values with other (non-Aboriginal) communities.

Places of post-contact Aboriginal history have generally been poorly recognised in investigations of Aboriginal heritage. Consequently, the Aboriginal involvement and contribution to important regional historical themes is often missing from accepted historical narratives. This means it is often necessary to collect oral histories along with archival or documentary research to gain enough understanding of historic values.

7.2 ASSESSED SIGNIFICANCE OF THE RECORDED SITES

Table 7-1 presents a summary of the significance assessment of Aboriginal cultural heritage sites recorded during this assessment. Further details of each of the assessment criteria are provided below.

Social or Cultural Value

The social and cultural value of Aboriginal sites is generally determined through consultation with Aboriginal people.

Generally, the Aboriginal community regard all sites as having high cultural significance. This is due to all sites, even displaced artefact sites, being able to provide a connection to their ancestors, as well as being a tangible reminder of the past Aboriginal occupation of the area.

A copy of this ACHAR was sent to the RAPs on 14 September 2021 (**Appendix 1 Figure 8**). No feedback was received relating to the social or cultural value of the newly recorded site or the broader study area. As such, for the purposes of assessing the potential impact to Aboriginal cultural heritage, the recorded site has been accorded high social and cultural values.

Archaeological/Scientific Value

Wallah Wallah Creek-OS1 is representative of artefact sites recorded elsewhere in the region. The site is a low-density scatter with a low complexity of tools and is manufactured from materials which are common in the region. In addition, the site is in a location where disturbances from the area's agricultural land use and/or erosion is prevalent. As the site has been recorded in association with PAD, the research potential is slightly raised, although intact stratified deposits are not expected due to disturbances from ploughing and deep deposits are not expected.

Aesthetic Value

Wallah Wallah Creek-OS1 has been assessed as having low aesthetic value. The site does not have significant aesthetic value as the integrity of the sensory landscape has been altered in historic and modern times. Additionally, the artefacts are not remarkable.

Historic Value

Wallah Wallah Creek-OS1 does not have any association with important persons, places, or events. Therefore, the site has no historic values.

Table 7-1: Aboriginal cultural heritage: significance assessment.

Site Name	Social or Cultural Value	Archaeological / Scientific Value	Aesthetic Value	Historic Value
Wallah Wallah Creek-OS1	High	Low-moderate	Low	Nil

7.3 SUMMARY OF SIGNIFICANCE

The intangible Aboriginal cultural values across the wider district relate to a number of important places and themes associated with non-archaeological cultural values. These places mainly relate to spiritual and ceremonial connections across the broader landscape that may encompass areas of culturally significant geographical features, such as the Bogolong Hills, located approximately 8 km to the west of the study area.

There may be places with intangible cultural significance within the study area, although no specific locations have so far been identified by the Aboriginal community.

The scientific value of the only recorded sites within the study area (Wallah Wallah Creek-OS1) is considered to have low-moderate potential to provide further information on the traditional Aboriginal use of the Central West region. The remainder of the study area has very low scientific value as it is confined to areas away from optimal occupation locations such as along reliable water sources or landforms which provide shelter.

Apart from the general understanding of the aesthetic qualities of the study area, there are no known places with identified aesthetic values.

8 ASSESSING HARM

8.1 AVOIDING AND MINIMISING HARM

8.1.1 Conserving significant Aboriginal cultural heritage

An object of the NPW Act is the '*conservation of objects places and features... of cultural value within the landscape, including... places, objects and features of significance to Aboriginal people*' (s.2A(1(b)(i)).

As heritage professionals, OzArk, strives for good conservation outcomes. In particular, OzArk is primarily concerned with the conservation and protection of Aboriginal cultural heritage that is of significance to Aboriginal people.

Two primary objectives when managing harm to an Aboriginal object are:

- Impacts to significant Aboriginal objects and places should always be avoided wherever possible
- Where impacts to Aboriginal objects and places cannot be avoided, proposals should be amended to reduce the extent and severity of impacts to significant Aboriginal objects and places using reasonable and feasible measures.

8.1.2 Opportunities to conserve Aboriginal cultural values

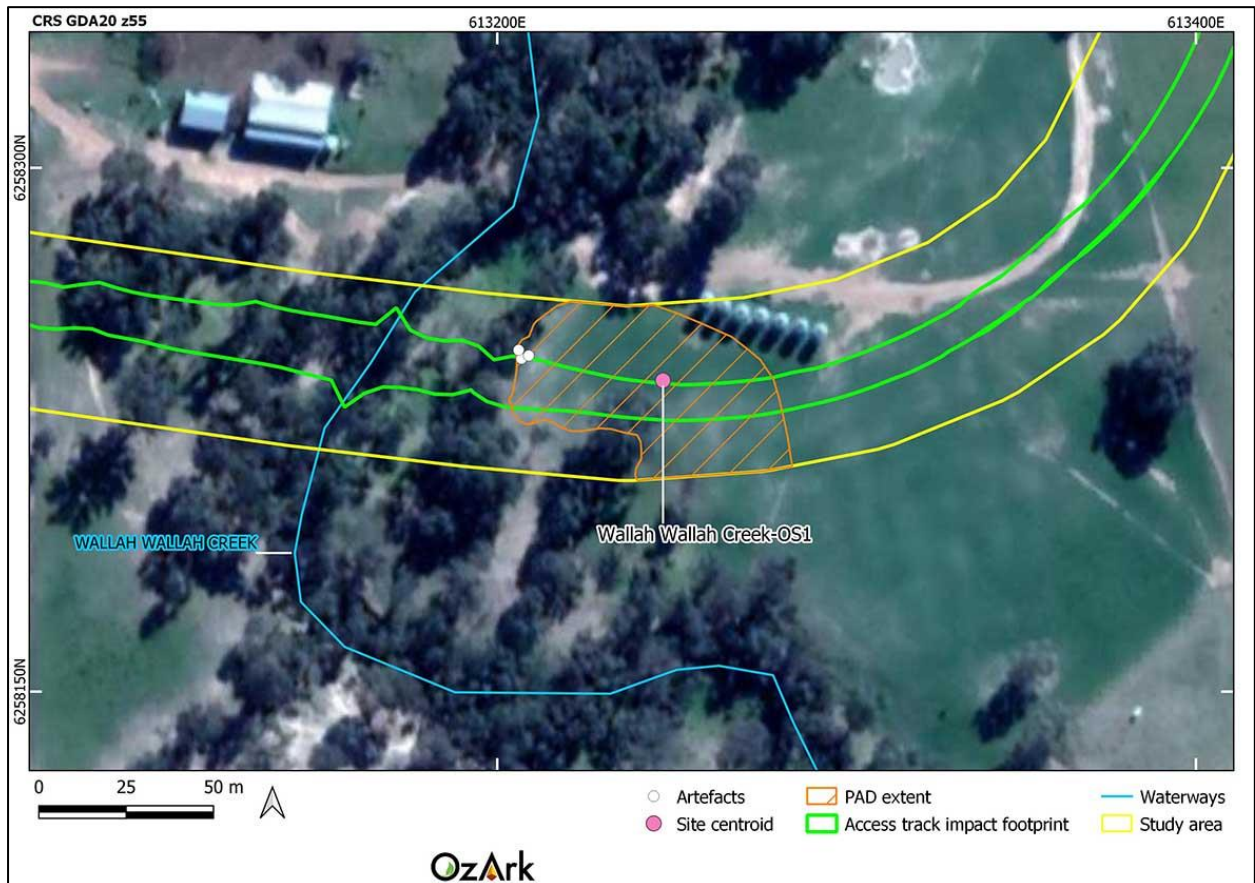
The Aboriginal site located within the study area, Wallah Wallah Creek OS-1, is along the proposed access track alignment. Movement of the access track is not considered to be warranted as any movement of the access track to the north or south would still result in impact to the terrace landform of Wallah Wallah Creek where further Aboriginal objects are likely to be present.

8.2 LIKELY IMPACTS TO ABORIGINAL HERITAGE FROM THE PROJECT

The Aboriginal site located within the study area, Wallah Wallah Creek OS-1, the proposed impact footprint of the access track and therefore will be impacted by the project. The width of the proposed access track within the extent of Wallah Wallah Creek-OS1 ranges from 10 to 15 m, so the site will only be partially impacted (**Table 8-1** and **Figure 8-1**).

Table 8-1: Aboriginal cultural heritage: impact assessment.

Site Name	Type of Harm (Direct/Indirect/None)	Degree of Harm (Total/Partial/None)	Consequence of Harm (Total/Partial/No Loss of Value)
Wallah Wallah Creek OS-1	Direct	Partial	Partial loss of value

Figure 8-1: Location of Wallah Wallah Creek-OS1 in relation to the project components.

8.3 ECOLOGICALLY SUSTAINABLE DEVELOPMENT PRINCIPLES

Ecologically sustainable development principles (ESD) (defined in s.6 of the *Protection of the Environment Administration Act 1991*) requires the integration of economic and environmental considerations (including cultural heritage) in the decision-making process. Regarding Aboriginal cultural heritage, ESD can be achieved by applying the principle of intergenerational equity and the precautionary principle.

8.3.1 Intergenerational equity

Intergenerational equity is the principle whereby the present generation should ensure the health, diversity and productivity of the environment for the benefit of future generations.

In terms of Aboriginal 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 permits), fewer opportunities remain for future generations of Aboriginal people to enjoy the cultural benefits of those Aboriginal objects and places.

Information about the integrity, rarity or representativeness of the Aboriginal objects and places proposed to be impacted, and how they illustrate the occupation and use of land by Aboriginal

people across the region, will be relevant to the consideration of intergenerational equity and the understanding of the cumulative impacts of the project.

Where there is uncertainty, the precautionary principle should also be followed.

8.3.1.1 The precautionary principle

The precautionary principle states that 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.

In relation to Aboriginal cultural values, the precautionary principle should be guided by:

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

8.3.2 Principle of Integration

The Plan of Implementation of the World Summit on Sustainable Development held in Johannesburg, 2002, noted the need to “*promote the integration of the three components of sustainable development- economic development, social development and environmental protection- as interdependent and mutually reinforcing pillars*”.

The principle of integration ensures mutual respect and reciprocity between economic and environmental considerations:

- Environmental considerations are to be integrated into economic and other development plans, programs, and projects
- Development needs are to be considered in applying environmental objectives.

8.3.3 Applicability to the project

The project adds to the cumulative impact on the region’s Aboriginal cultural heritage as one Aboriginal site will be harmed and the landscape within the study area will be modified, although the impacts to the landscape are relatively minor and reversible.

One Aboriginal site (Wallah Wallah Creek OS-1) will be partially impacted by the project (**Section 8.2**). As such, management strategies will be implemented to mitigate the harm to Aboriginal cultural heritage at Wallah Wallah Creek OS-1.

Wallah Wallah Creek OS-1 consists of a low-density artefact scatter with PAD, although it is not considered to be associated with intact subsurface deposits. The site has been assessed as having low to moderate scientific significance.

Stone artefact sites are one of the most common site types in the region. As such, numerous examples would continue to be available to future generations, with over 20 similar sites recorded within 40 km of the study area.

In addition, surface collection and excavation are proposed to mitigate the impact from the project and loss of value of the Wallah Wallah Creek OS-1. A salvage report of the excavation findings would be produced to contribute to the archaeological record, which would also be available to future generations.

Table 8-2 examines the application of ESD principles to the project.

Table 8-2: Application of ESD principles to the project.

ESD principle	Response
Avoiding and minimising harm	The project is unable to avoid the recorded Aboriginal site (Wallah Wallah Creek OS-1) within the study area, however, mitigation measures are outlined in Section 9.2 to minimise harm to the cultural value of the site.
The integration principle	The project will seek to minimise environmental and heritage harm wherever possible. While Wallah Wallah Creek-OS1 will be impacted by the project, measures will be implemented to mitigate the loss of value associated with the site.
The precautionary principle	The project has followed the precautionary principle through undertaking a robust impact assessment. The survey adopted a precautionary principle when it came to describing and assessing the archaeological potential of landforms within the study area.
The intergenerational equity principle	While it is acknowledged that the loss of Aboriginal site Wallah Wallah Creek OS-1 is a diminution of inter-generational equity, the mitigation measures contained in this ACHAR are designed to partially mitigate this loss of inter-generational equity.

9 MANAGEMENT OF ABORIGINAL CULTURAL HERITAGE SITES

9.1 GENERAL MANAGEMENT PRINCIPLES

Appropriate management of cultural heritage items is primarily determined based on their assessed significance as well as the likely impacts of the proposed development. **Section 7.2** and **Section 8.2** describe, respectively, the significance / potential of the recorded sites and the likely impacts of the development. The following management options are general principles, in terms of best practice and desired outcomes, rather than mitigation measures against individual site disturbance.

- Avoid impact by altering the development proposal or in this case by avoiding impact to a recorded Aboriginal site. If this can be done, then a suitable curtilage around the site must be provided to ensure its protection both during the short-term construction phase of development and in the long-term use of the area. If plans are altered, care must be taken to ensure that impacts do not occur to areas not previously assessed.
- If impact is unavoidable then approval to disturb sites under the authority of an ACHMP must be sought from DPIE. Normally the management recommendations contained in the ACHAR become policies of the ACHMP. As the Aboriginal community have been provided the opportunity to view the draft ACHAR, the ACHAR must make it clear that a future ACHMP will manage Aboriginal cultural heritage within the study area so that the Aboriginal community can assess the management recommendations with this knowledge. The ACHMP policies will often stipulate that the Aboriginal community should be involved in any salvage activities and will dictate what the fate of any salvaged Aboriginal objects will be.

9.2 MANAGEMENT AND MITIGATION MEASURES

9.2.1 Management and mitigation of the recorded Aboriginal site

Based on the current impact footprint of the project, Wallah Wallah Creek-OS1 will be partially impacted by the construction of the access track. It is therefore recommended that surface artefacts be retrieved following project approval and a program of subsurface excavations take place within the impact footprint.

Section 9.2.1 and **9.2.1.2** provide for the proposed management of the objects at Wallah Wallah Creek-OS1. **Section 9.2.1.4** outlines the options for the long-term management of any salvaged objects.

9.2.1.1 Surface collection methodology

The recommended methodology for the surface collection at Wallah Wallah Creek-OS1 will be finalised after the approvals process as part of the ACHMP, but will include the following measures:

- The artefacts should be flagged in the field
- The site should be photographed after flagging and before recording
- All artefacts should have the following artefact information recorded:
 - Location
 - Artefact class
 - Artefact type
 - Size
 - Reduction level
 - Raw material
 - Notes.
- A selection of indicative and / or unusual artefacts from each site will be photographed
- Should the collection team encounter a human burial, all work should cease in the area and the unanticipated skeletal remains protocol in **Section 9.2.3** followed
- The recording of the artefact recovered will largely be completed in the field and this data would be incorporated into a report
- An Aboriginal Site Impact Recording Form (ASIRF) will be submitted by the archaeologist detailing the salvage process and results of the site.

9.2.1.2 Subsurface excavation

As partial impact to Wallah Wallah Creek-OS1 cannot be avoided, it is recommended that a program of archaeological excavation take place at the site following project approval where the proposed road will impact the area of PAD.

The aim of the excavation will be to confirm that there are no subsurface archaeological deposits of conservation value present.

The program should consist of at least eight 50 cm x 50 cm excavation squares (two square metres) placed within the impact footprint of the access track (**Figure 8-1**). It would be possible to expand the excavation of a particular square should the archaeological deposit suggest that this would be worthwhile. The methodology of any further investigation would be contained in the ACHMP.

9.2.1.3 Fencing of the Aboriginal site

To ensure the portion of Wallah Wallah Creek-OS1 outside of the impact footprint of the proposed access track is not inadvertently impacted by the project, temporary fencing should be erected along the boundaries of the impact footprint during construction of the access track.

9.2.1.4 Long-term management of Aboriginal objects

The ACHMP will include protocols for the long-term management of any Aboriginal objects salvaged from Wallah Wallah Creek-OS1.

Suitable procedures could include the reburial of artefacts at a location outside of impacts that adheres to Requirement 26 of the Code of Practice, or the removal of artefacts to an agreed place of safe-keeping as agreed to by RAPs and Heritage NSW and approved through a Care Agreement.

9.2.2 Unanticipated finds protocol

Should consent for the project be gained, an ACHMP will be developed in consultation with RAPs and DPIE. The ACHMP will contain procedures should new discovery of Aboriginal artefacts be made during construction and / or operation of the project. The procedure in **Section 9.2.2.1** is an example of an unanticipated finds protocol that could be incorporated into the ACHMP.

9.2.2.1 Unanticipated finds protocol example

An Aboriginal artefact is anything which is the result of past Aboriginal activity. This includes stone (artefacts, rock engravings etc.), plant (culturally scarred trees) and animal (if showing signs of modification, i.e., smoothing, use). Human bone (skeletal) remains may also be uncovered while on site.

Cultural heritage significance is assessed by the Aboriginal community and is typically based on traditional and contemporary lore, spiritual values, and oral history, and may also consider scientific and educational value.

Protocol to be followed if previously unrecorded or unanticipated Aboriginal object(s) are encountered:

1. If any Aboriginal object is discovered and/or harmed in, or under the land, while undertaking the proposed development activities, the proponent must:
 - a. Not further harm the object
 - b. Immediately cease all work at the particular location
 - c. Secure the area so as to avoid further harm to the Aboriginal object
 - d. Notify Heritage NSW as soon as practical on (02) 9873 8500, providing any details of the Aboriginal object and its location

- e. Not recommence any work at the particular location unless authorised in writing by Heritage NSW.
2. If Aboriginal burials are unexpectedly encountered during the activity, work must stop immediately, the area secured to prevent unauthorised access and NSW Police and Heritage NSW contacted.
3. Cooperate with the appropriate authorities and relevant Aboriginal community representatives to facilitate:
 - a. The recording and assessment of the find(s)
 - b. The fulfilment of any legal constraints arising from the find(s), including complying with Heritage NSW directions
 - c. The development and implementation of appropriate management strategies, including consultation with stakeholders and the assessment of the significance of the find(s).
4. Where the find(s) are determined to be Aboriginal object(s), recommencement of work in the area of the find(s) can only occur in accordance with any consequential legal requirements and after gaining written approval from Heritage NSW.

9.2.3 Unanticipated skeletal remains protocol

Should consent for the project be gained, an ACHMP will be developed in consultation with RAPs and DPIE. The ACHMP will contain procedures should a new discovery of human skeletal remains be made during construction or operation of the project. The procedure listed below is an example of a human skeletal remains protocol that could be incorporated into the ACHMP.

The protocol will include:

1. Cordon off area with a minimum buffer of 10 m in all directions from the visible remains. Do not disturb any skeletal material that remains in place. If some skeletal remains have been removed from the ground, store these in a dry location on site. Do not remove any skeletal material or associated artefacts from site.
2. If bones are suspected to be human, the site supervisor should immediately contact the nearest police station. Heritage NSW should also be contacted on (02) 9873 8500 to assist with the identification of the burial. Police will make an initial assessment to determine if the remains are part of crime scene or possible ancient Aboriginal remains. Such an assessment will usually involve sending photographs of the find to a physical anthropologist to determine the ethnic origin of the skeleton.
3. If the skeletal material is determined to be ancient Aboriginal remains, Heritage NSW would send a Compliance and Regulation Officer to the scene and then issue an Advisory Letter setting out the required process from this point.
4. Notify the Aboriginal community.

5. The Aboriginal ancestral remains must be recorded under the direct supervision of a specialist anthropologist or other suitably qualified person.
6. The location of the burial must be registered as an Aboriginal site on the AHIMS database.
7. Work cannot recommence in the cordoned off area until authorised in writing by Heritage NSW.

10 RECOMMENDATIONS

Under Section 89A of the NPW Act it is mandatory that all newly recorded Aboriginal sites be registered with AHIMS. As a professional in the field of cultural heritage management it is the responsibility of OzArk to ensure this process is undertaken.

To this end it is noted that one Aboriginal site was recorded during the assessment.

The following recommendations are made based on these impacts and regarding:

- Legal requirements under the terms of the NPW Act whereby it is illegal to damage, deface or destroy an Aboriginal place or object without an approved ACHMP
- The findings of the current investigations undertaken within the study area
- The interests of the Aboriginal community.

Recommendations concerning Aboriginal cultural values within the study area are as follows:

1. Following development consent of the project, the proponent will develop an ACHMP which is to be agreed to by the RAPs, Heritage NSW, and DPIE. The ACHMP will include the salvage methodology, long-term management of any artefacts, an unanticipated finds protocol, an unanticipated skeletal remains protocol and heritage site inductions for staff and contractors.
2. Following approval of the ACHMP, the portion of Wallah Wallah Creek-OS1 in the impact footprint of the project should be subject to the surface collection methodology set out in **Section 9.2.1.1**; the excavation methodology set out in **Section 9.2.1.2** and fencing outlined in **Section 9.2.1.3**. The salvaged objects should be managed in accordance with the agreed long-term management option detailed in **Section 9.2.1.4**.
3. All land-disturbing activities must be confined to within the study area. Should the parameters of the proposed work extend beyond this, then further archaeological assessment may be required.

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PLATES



Plate 1: View east across Survey Unit 1 along the proposed access track from Goolagong Road.



Plate 2: View south across Survey Unit 2 along the proposed access track to Farm 1.



Plate 3: View south across Survey Unit 3 along the proposed access track to Farm 1.



Plate 4: View north across proposed Farm 1 in Survey Unit 4.



Plate 5: View west across proposed Farm 1 in Survey Unit 5.



Plate 6: View east along the proposed access track in Survey Unit 6.



Plate 7: View south along the proposed access track in Survey Unit 9.



Plate 8: View north across proposed Farm 23 in Survey Unit 8.

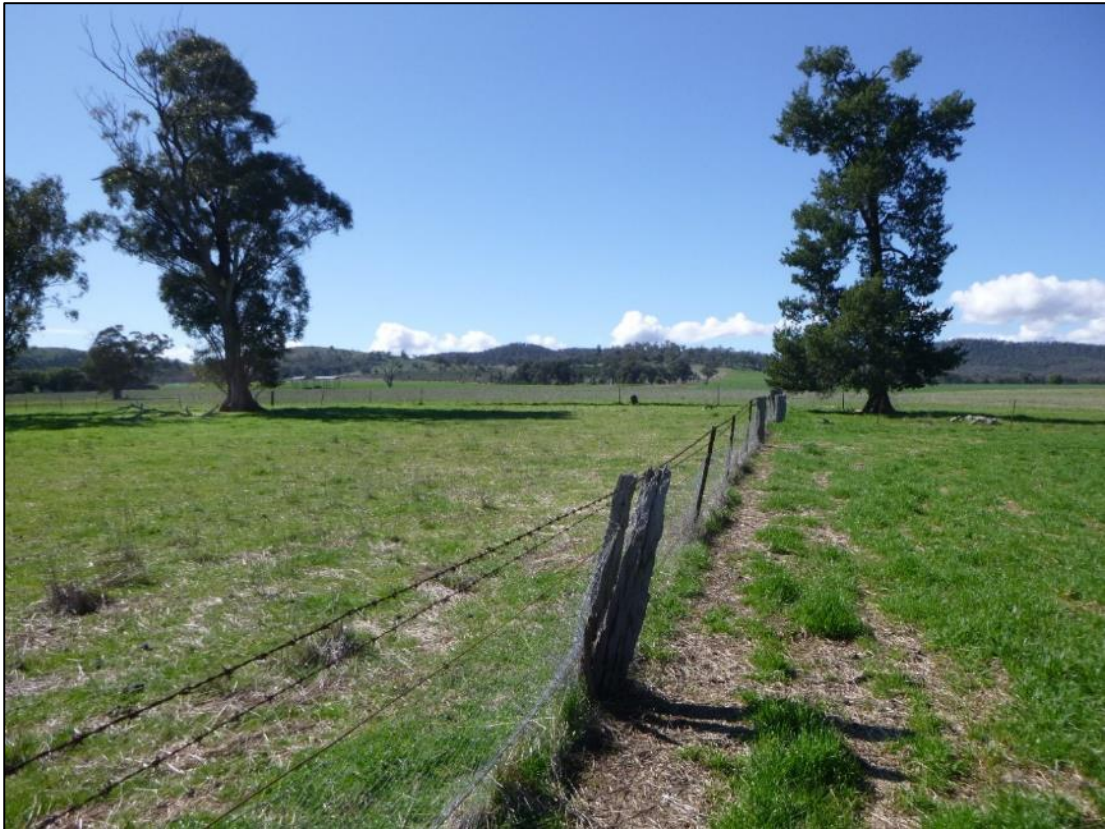


Plate 9: View east along the proposed access track in Survey Unit 9.



Plate 10: View southeast across proposed Farm 3 in Survey Unit 10.



Plate 11: View southwest across the proposed access track in Survey Unit 11.



Plate 12: View west across proposed Farm 4 in Survey Unit 12.

APPENDIX 1: ABORIGINAL CONSULTATION

Appendix 1 Figure 1: Consultation Log.

Date	Organisation	Comment	Method
1.7.21	Grenfell Record	Rebecca Hardman (RH) sent ad off to the newspaper	email
1.7.21	Heritage NSW	RH sent stage1 agency letter requesting potential stakeholders. Closing date 15.7.21	email
1.7.21	Cowra Local Aboriginal Land Council	RH sent stage1 agency letter requesting potential stakeholders. Closing date 15.7.21	email
1.7.21	Office of The Registrar, ALRA	RH sent stage1 agency letter requesting potential stakeholders. Closing date 15.7.21	email
1.7.21	National Native Title Tribunal	RH sent stage1 agency letter requesting potential stakeholders. Closing date 15.7.21	email
1.7.21	NTSCORP	RH sent stage1 agency letter requesting potential stakeholders. Closing date 15.7.21	email
1.7.21	Weddin Shire Council	RH sent stage1 agency letter requesting potential stakeholders. Closing date 15.7.21	email
1.7.21	Central West Local Land Services	RH sent stage1 agency letter requesting potential stakeholders. Closing date 15.7.21	email
1.7.21	Grenfell Record	RH received proof	email
1.7.21	Grenfell Record	RH approved proof and requested tear sheet and receipt	email
1.7.21	Grenfell Record	RH received receipt	email
1.7.21	Heritage NSW	RH received stakeholder list	email
2.7.21	National Native Title Tribunal	RH received notification <i>Based on the records held by the National Native Title Tribunal as at 07 July 2021 it would appear that there are no Native Title Determination Applications, Determinations of Native Title, or Indigenous Land Use Agreements over the identified area.</i>	email
8.7.21	Corroboree Aboriginal Corporation	RH sent Community EOI letter. RSVP 9am 26/7/21	email
8.7.21	Cowra Local Aboriginal Land Council	RH sent Community EOI letter. RSVP 9am 26/7/21	email
8.7.21	Didge Ngunawal Clan	RH sent Community EOI letter. RSVP 9am 26/7/21	email
8.7.21	Trevor Robinson	RH sent Community EOI letter. RSVP 9am 26/7/21	Post
8.7.21	Wiradjuri Interim Working Party	RH sent Community EOI letter. RSVP 9am 26/7/21	Post
8.7.21	Didge Ngunawal Clan	Registered as a RAP	email
8.7.21	Didge Ngunawal Clan	RH thanked	email
8.7.21	Stakeholder 1	Registered as a RAP	email
8.7.21	Stakeholder 2	Registered as a RAP	email
12.7.21	Stakeholder 1	RH thanked	email
12.7.21	Stakeholder 2	RH thanked	email
16.7.21	Cowra Local Aboriginal Land Council	Stephanie Rusden (SR) had telephone conference with Dan Rose and Esther Cutmore to discuss the project and consultation on the project to date. SR outlined the project and noted that the proposed survey methodology would be with RAPs in the next few weeks. Esther noted that she prefers that any artefacts that need to be collected	phone

Date	Organisation	Comment	Method
		following project approval and reburied somewhere on site.	
27.7.21	Cowra Local Aboriginal Land Council	RH sent stage 2. Feedback ends 24.8.21	email
27.7.21	Didge Ngunawal Clan	RH sent stage 2. Feedback ends 24.8.21	email
27.7.21	Stakeholder 1	RH sent stage 2. Feedback ends 24.8.21	email
27.7.21	Stakeholder 2	RH sent stage 2. Feedback ends 24.8.21	email
27.7.21	Heritage NSW	RH sent Notification of RAPs	email
27.7.21	Cowra Local Aboriginal Land Council	RH sent Notification of RAPs	email
28.7.21	Didge Ngunawal Clan	RH received confirmation supporting the methodology	email
29.7.21	Didge Ngunawal Clan	RH thanked	email
2.8.21	Stakeholder 1	RH received confirmation supporting the methodology	email
13.8.21	Cowra Local Aboriginal Land Council	Brendan Fisher (BF) sent fieldwork invitation	email
16.8.21	Cowra Local Aboriginal Land Council	Dan Rose (interim CEO) emailed BF with new CLALC new site worker policies as a reply to FW invitation	email
16.8.21	Cowra Local Aboriginal Land Council	BF thanked Dan	email
16.8.21	Cowra Local Aboriginal Land Council	BF asked if Dan could send through 'Request for Site Work Form' mentioned in the CLALC policy he previously sent through	email
18.8.21	Cowra Local Aboriginal Land Council	BF emailed Dan 'request for site work form'. Also mentioned site officers have been reduced to 1 instead of 2.	email
18.8.21	Cowra Local Aboriginal Land Council	BF phoned to reiterated previous email. Left msg	phone
18.8.21	Cowra Local Aboriginal Land Council	Dan emailed to say that CLALC will provide one site officer	email
23.8.21	Cowra Local Aboriginal Land Council	Dan provided site officer name	email
23.8.21	Cowra Local Aboriginal Land Council	BF asked for Stuart Cutmore's contact details	email
24.8.21	Cowra Local Aboriginal Land Council	Dan said he would get back to us	email
24.8.21	Cowra Local Aboriginal Land Council	Stuart Cutmore phoned to confirm Thursday 26th fieldwork	phone
24.8.21	Cowra Local Aboriginal Land Council	Dan emailed BF to disregard Stuart Cutmore's financial details in previous email	email
24.8.21	Cowra Local Aboriginal Land Council	BF thanked Dan for the notice	email
14.9.21	Cowra Local Aboriginal Land Council	Barry Kerton (BK) sent stage 4 letter with a copy of the draft Aboriginal Cultural Heritage Assessment Report (ACHAR)	email
14.9.21	Didge Ngunawal Clan	BK sent stage 4 letter with a copy of the draft ACHAR	email
14.9.21	Stakeholder 1	BK sent stage 4 letter with a copy of the draft ACHAR	email
14.9.21	Stakeholder 2	BK sent stage 4 letter with a copy of the draft ACHAR	email
16.9.21	Stakeholder 2	BK received an email saying that they agree with the methodology	email
16.9.21	Stakeholder 2	BK sent an email thanking them	email

Appendix 1 Figure 2: Stage 1 advertisement.

6 THE GRENFELL RECORD Wednesday, July 7, 2021
grenfellrecord.com.au

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laurence.isell.g@herbalife.com

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PT / FT Work from Home
6 Figure Income \$\$
Only serious people PLEASE
02 9990 8483 (24hrs)

Public Notices

Expression of Interest Cultural Heritage Management
On behalf of Balada Properties Pty Limited (Balada), OzArk Environment & Heritage has been engaged to seek registration of Aboriginal groups or individuals who are interested in being consulted with regard to an Aboriginal cultural heritage assessment for the proposed construction of a poultry farm approximately 11 kilometres (km) north of Grenfell, NSW. The development will consist of 4 farms, each with 10 sheds, covering approximately 30 hectares (ha) located in the Weddin Local Government Area (LSA).
This consultation will form part of an Aboriginal Cultural Heritage Assessment Report (ACHAR) and will assist Heritage NSW in their consideration and determination of the Project.
If you hold cultural knowledge relevant to determining the cultural significance of Aboriginal objects or places in the proposed study area, please register your interest. Registrations can be made by post: OzArk, EHM, PO Box 2069 Dubbo NSW 2830; email: rebecca@ozarkem.com.au; or by phoning OzArk on 02 6882 0118. All submissions should be received no later than **Wednesday 21st July 2021**.

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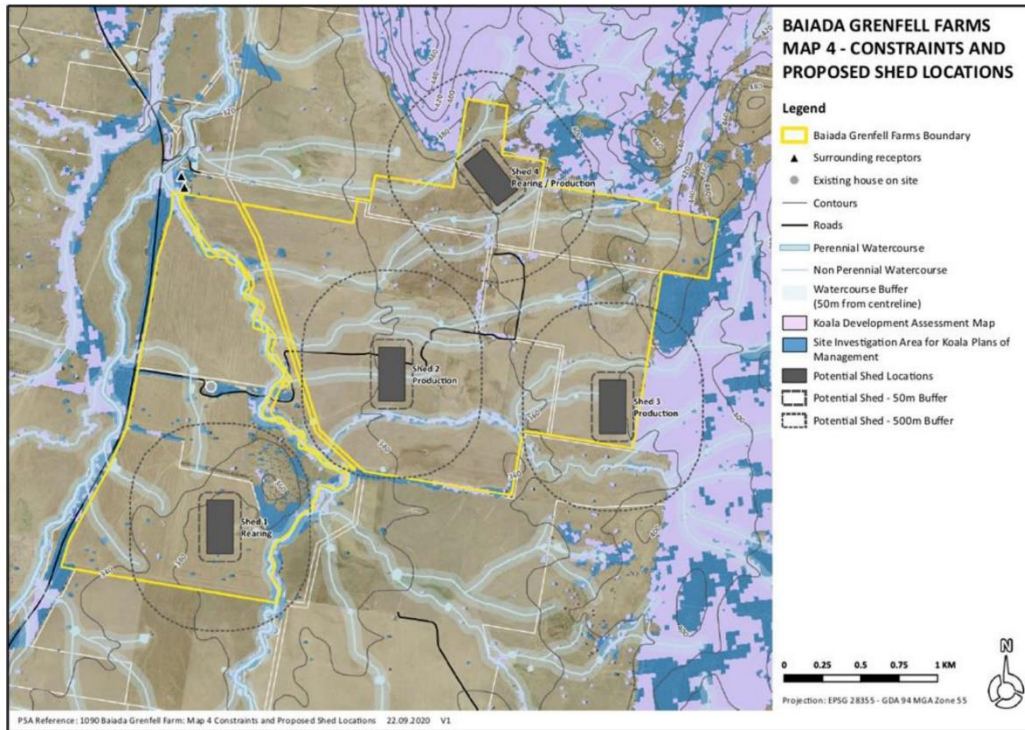
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Self Service

Appendix 1 Figure 3: Stage 1 letters to agencies (sample).



Figure 1. Indicative Project Location



Appendix 1 Figure 4: Stage 1 replies from agencies.



Our reference: Doc21/546736

Rebecca Hardman
Office Manager
OzArk Environment and Heritage
145 Wingewarra Street
Dubbo NSW 2830

01/07/2021

Dear Rebecca,

**WRITTEN NOTIFICATION OF PROPOSAL AS REQUIRED UNDER DECCW ABORIGINAL
CULTURAL HERITAGE CONSULTATION REQUIREMENTS FOR PROPONENTS 2010**

Subject: The Grenfell Poultry Farm.

Thank you for your correspondence dated 1 July 2021 to Heritage NSW (Department of Premier and Cabinet) regarding the above project.

Attached is a list of known Aboriginal parties for the proposed development at Weddin Local Government Area that Heritage NSW considers likely to have an interest in the activity.

Please note this list is not necessarily an exhaustive list of all interested Aboriginal parties.

Receipt of this list does not remove the requirement of a proponent/ consultant to advertise in local print media and contact other bodies seeking interested Aboriginal parties, in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (April 2010).

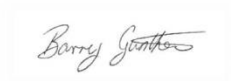
Under Section 4.1.6. of the Consultation Requirements, you must also provide a copy of the names of each Aboriginal person who registered an interest to the relevant Heritage NSW office and Local Aboriginal Land Council (LALC) within 28 days from the closing date for registering an interest.

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

Level 6, 10 Valentine Ave Parramatta NSW 2150 ■ Locked Bag 5020 Parramatta NSW 2124
P: 02 9873 8500 ■ E: heritagemailbox@environment.nsw.gov.au

If you have any questions about this advice, please email:
heritagemailbox@environment.nsw.gov.au or contact (02) 9873 8500.

Yours sincerely



Barry Gunther
Aboriginal Heritage Planner
Aboriginal Heritage Regulation Branch – South Heritage NSW

Attachment A:

Registered Aboriginal Interests DPC RAP List for the Weddin Local Government Area.

LIST OF ABORIGINAL STAKEHOLDERS FOR THE DEPARTMENT OF PREMIER and CABINET (DPC) SOUTHERN REGION HELD BY DPC FOR THE PURPOSES OF THE OEH ABORIGINAL CULTURAL HERITAGE CONSULTATION REQUIREMENTS FOR PROPONENTS 2010

These lists are provided to proponents in accordance with section 4.1.2 of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (the "Consultation Requirements") which commenced on 12 April 2010.

The consultation process involves getting the views of, and information from, Aboriginal people and reporting on these. It is not to be confused with other field assessment processes involved in preparing a proposal and an application. 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 these requirements will continue irrespective of potential or actual employment opportunities for Aboriginal people.

A copy of the Consultation Requirements can be found on the OEH website at:
<http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreg.pdf>

Under the Consultation Requirements, a proponent is required to provide Aboriginal people who may hold cultural knowledge relevant to determining the cultural significance of Aboriginal objects and/or places as relevant to the proposed project area, with an opportunity to be involved in consultation. Section 3.3.1 of the Consultation Requirements states that Aboriginal people who can provide this information are, based on Aboriginal lore and custom, the traditional owners or custodians of the land that is the subject of the proposed project.

The Consultation Requirements also state that:

Traditional owners or custodians with appropriate cultural heritage knowledge to inform decision making who seek to register their interest as an Aboriginal party are those people who:

- *continue to maintain a deep respect for their ancestral belief system, traditional lore and custom*
- *recognise their responsibilities and obligations to protect and conserve their culture and heritage and care for their traditional lands or Country*
- *have the trust of their community, knowledge and understanding of their culture, and permission to speak about it.*

Please note: the placement of an organisation's name on any OEH Aboriginal stakeholder list for the Consultation Requirements does not override a proponent's requirement to also advertise in the local newspaper and to seek from other sources the names of any other Aboriginal people who may hold cultural knowledge as required under clause 60 of the National Parks and Wildlife Regulation 2019.

How to use this list

1. Contact the organisations/individuals who have indicated an interest in the relevant LGA/s and invite them to register an interest in your project

Do not reproduce the attached list in publicly available reports and other documents. Your report should only contain the names of the organisations and individuals who you have invited to register an interest in your project and those who have registered as stakeholders for your project.

Last updated 15 June 2021

Weddin Local Government Area

Organisation/ Individual	Contact Name	Email Address/ Fax / Phone	Postal Address	Additional information
Corroboree Aboriginal Corporation	Marilyn Carroll-Johnson, Director	[REDACTED]	[REDACTED]	
Cowra LALC	Chairperson	[REDACTED]	[REDACTED]	
Didge Ngunawal Clan	Lilly Carroll/ Paul Boyd	[REDACTED]	[REDACTED]	
Trevor Robinson	Trevor Robinson	[REDACTED]	[REDACTED]	
Wiradjuri Interim Working Party		[REDACTED]	[REDACTED]	

RE: SR21/988 - GRENFELL POULTRY FARM - SR21/988

Geospatial Search Requests <GeospatialSearch@NNTT.gov.au>
To: Rebecca Hardman

Reply Reply All Forward ...

Fri 2/07/2021 6:16 PM

UNCLASSIFIED

Native title search – NSW Parcels – Multiple

Your ref: 2893 - Our ref: SR21/988

Dear Rebecca Hardman,

Thank you for your search request received on 01 July 2021 in relation to the above area. Based on the records held by the National Native Title Tribunal as at 07 July 2021 it would appear that there are no Native Title Determination Applications, Determinations of Native Title, or Indigenous Land Use Agreements over the identified area.

Search Results

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

- Schedule of Native Title Determination Applications
- Register of Native Title Claims
- Native Title Determinations
- Indigenous Land Use Agreements (Registered and notified)

At the time this search was carried out, there were **no relevant entries** in the above databases.

Cadastral data as at: 01/02/2021

Parcel ID	Feature Area SqKm	Overlapping Native Title Feature				
		Tenure	NNTT File Number	Name	Category	% Selected Feature
1//DP1022013	0.9932	FREEHOLD	No overlap			0.00%
		Tenure	NNTT File Number	Name	Category	% Selected Feature
1//DP1208485	0.0288	FREEHOLD	No overlap			0.00%
		Tenure	NNTT File Number	Name	Category	% Selected Feature
2//DP1208485	0.0553	FREEHOLD	No overlap			0.00%
		Tenure	NNTT File Number	Name	Category	% Selected Feature
22//DP888857	5.9811	FREEHOLD	No overlap			0.00%
		Tenure	NNTT File Number	Name	Category	% Selected Feature
3//DP1208485	0.0312	FREEHOLD	No overlap			0.00%
		Tenure	NNTT File Number	Name	Category	% Selected Feature

For more information about the Tribunal's registers or to search the registers yourself and obtain copies of relevant register extracts, please visit our [website](#).Information on native title claims and freehold land can also be found on the Tribunal's website here: [Native title claims and freehold land](#).

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

Appendix 1 Figure 5: Stage 1 letters to agencies (sample).

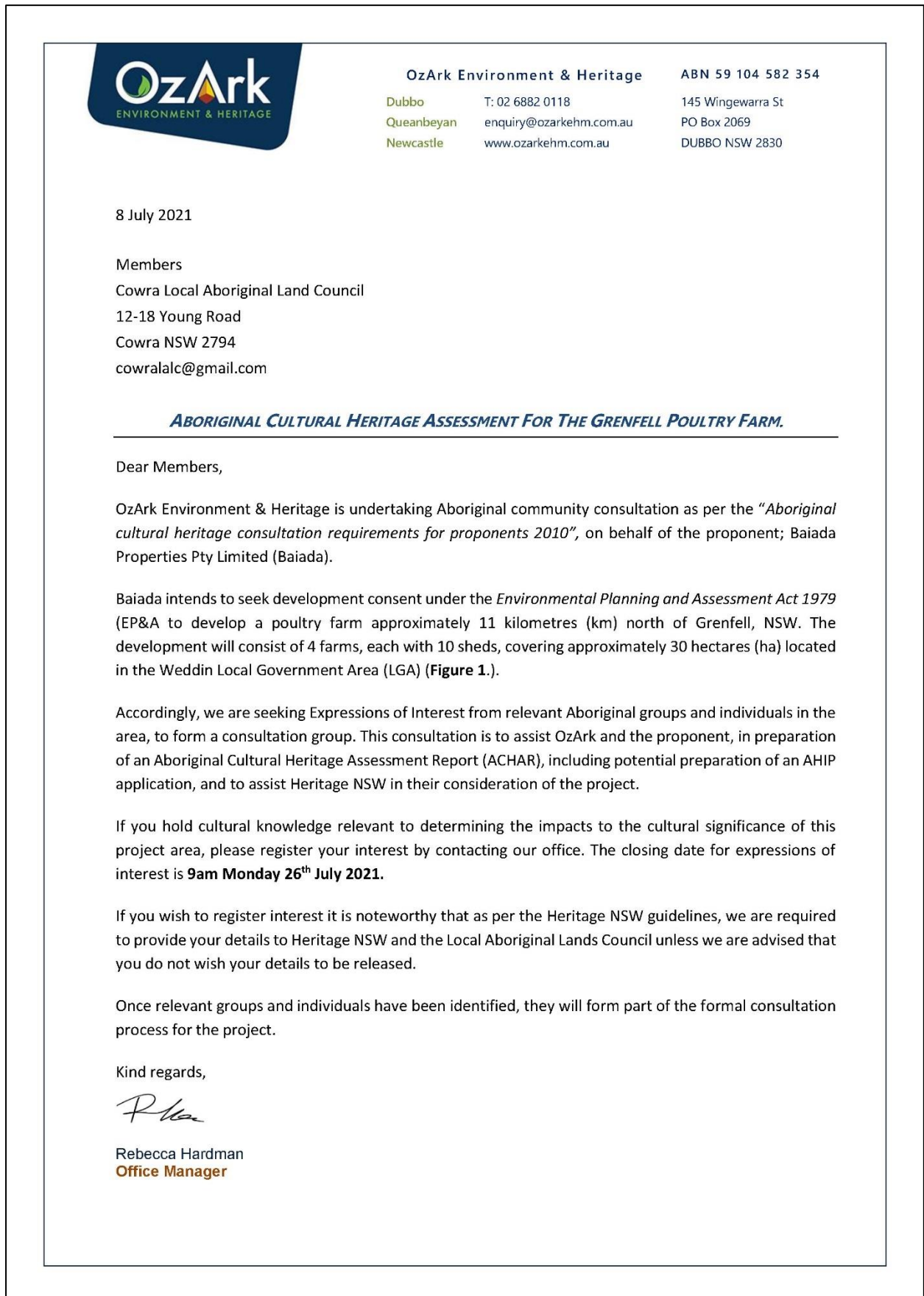
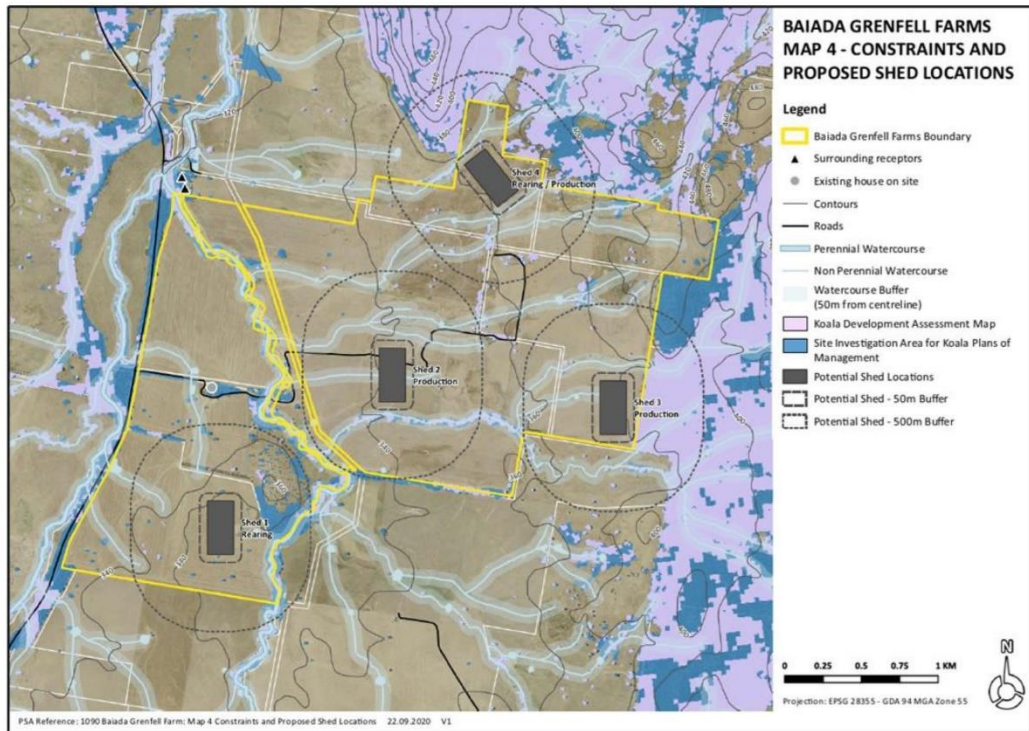


Figure 1: Indicative Project Location



Appendix 1 Figure 6: Stage 2/3 letters to RAPs.



OzArk Environment & Heritage

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27 July 2021

Members
Cowra Local Aboriginal Land Council
12-18 Young Road
Cowra NSW 2794
cowralalc@gmail.com

ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE GRENFELL POULTRY FARM

Dear Members,

Thank-you for your registration of interest to become a Registered Aboriginal Party (RAP) to be consulted for the proposed Grenfell Poultry Farm Project. OzArk are currently undertaking an Aboriginal Cultural Heritage Assessment (ACHA) for PSA Consulting, on behalf of Baiada Properties Pty Limited (the proponent). The project is to be assessed as State Significant Development (SSD) under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The purpose of the ACHA is to determine any impacts the proposed development will have on Aboriginal heritage values present within the study area and to assist in developing/modifying designs in order to minimise the impacts on Aboriginal heritage values.

The following project information and assessment methodology has been provided in accordance with section 4.2 and section 4.3 of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010a). The aim of this letter is to invite you to comment on the enclosed draft methodology for the Aboriginal Cultural Heritage Assessment Methodology, Grenfell Poultry Breeder Farm, Grenfell NSW, July 2021.

In addition to comments on the draft report, if you can share any Aboriginal cultural heritage knowledge relevant to the proposed study area, we welcome this input so as to improve our assessment outcomes and to ensure Aboriginal cultural values are considered. OzArk is required to give you 28 days to supply feedback on the attached documents. This period closes 5pm **on Tuesday 24th August 2021**.

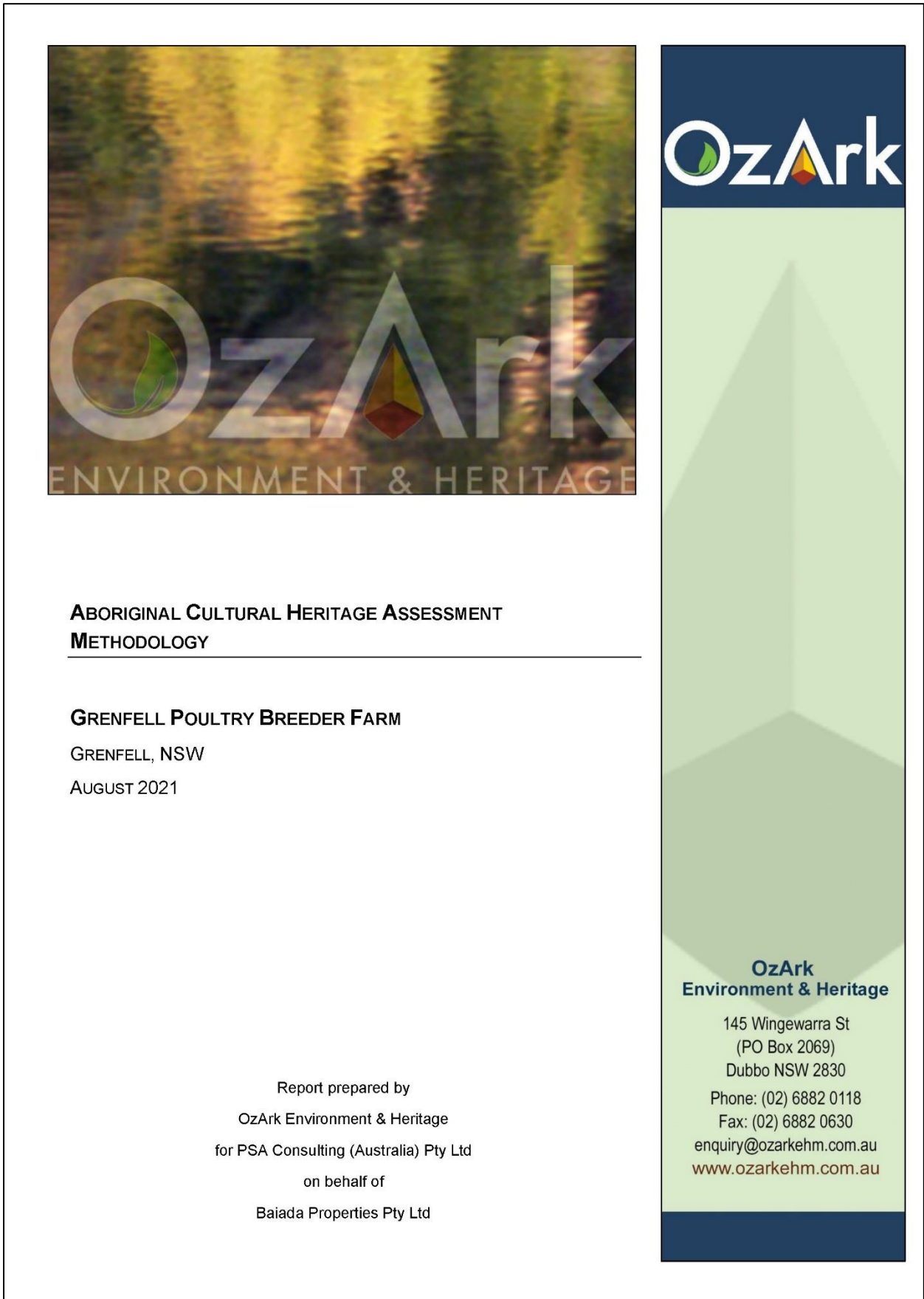
If you need any help supplying feedback or have any queries in relation to the enclosed information, please do not hesitate to contact our office.

Kind regards,



Rebecca Hardman
Office Manager

Appendix 1 Figure 7: Stage 2/3 assessment methodology.



OzArk
ENVIRONMENT & HERITAGE

**ABORIGINAL CULTURAL HERITAGE ASSESSMENT
METHODOLOGY**

GRENFELL POULTRY BREEDER FARM
GRENFELL, NSW
AUGUST 2021

Report prepared by
OzArk Environment & Heritage
for PSA Consulting (Australia) Pty Ltd
on behalf of
Baiada Properties Pty Ltd

**OzArk
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DOCUMENT CONTROLS

Proponent	Baiada Properties Pty Ltd	
Client	PSA Consulting (Australia) Pty Ltd	
Document Description	<i>Aboriginal Cultural Heritage Assessment Methodology: Grenfell Poultry Breeder Farm, Grenfell, NSW.</i>	
File Location	OzArk Job No.	
PSA Consulting\Poultry farms Gooloogong Rd Grenfell Nov2020\Assessment methodology	2893	
Document Status: V3.0 FINAL	Date 25 August 2021	
Draft V1.0 Author to editor OzArk 1 st internal (Series V1 = OzArk internal edits)	V1.0: SR author 16/7/2021 V1.1 BC edit 19/7/21	
Draft V2.0 Report Draft for release to client (Series V2 = OzArk and client edits)	V2.0 OzArk 19/7/21 V2.1 OzArk revises figures and sends to RAPs 27/7/21	
FINAL V3.0 = Final report	V3.0 OzArk finalised following Stage 4 25/7/21	
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<p>COPYRIGHT</p> <p>© OzArk Environment & Heritage 2021, © PSA Consulting (Australia) Pty Ltd 2021 and © Baiada Properties Pty Ltd</p> <p>All intellectual property and copyright reserved.</p> <p>Apart from any fair dealing for private study, research, criticism or review, as permitted under the Copyright Act, 1968, no part of this report may be reproduced, transmitted, stored in a retrieval system or adapted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without written permission.</p> <p>Enquiries should be addressed to OzArk Environment & Heritage.</p>		

Acknowledgement

OzArk acknowledge Traditional Owners of the area on which this assessment will take place and pay respect to their beliefs, cultural heritage, and continuing connection with the land. We also acknowledge and pay respect to the post-contact experiences of Aboriginal people with attachment to the area and to the elders, past and present, as the next generation of role models and vessels for memories, traditions, culture and hopes of local Aboriginal people.

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1 INTRODUCTION

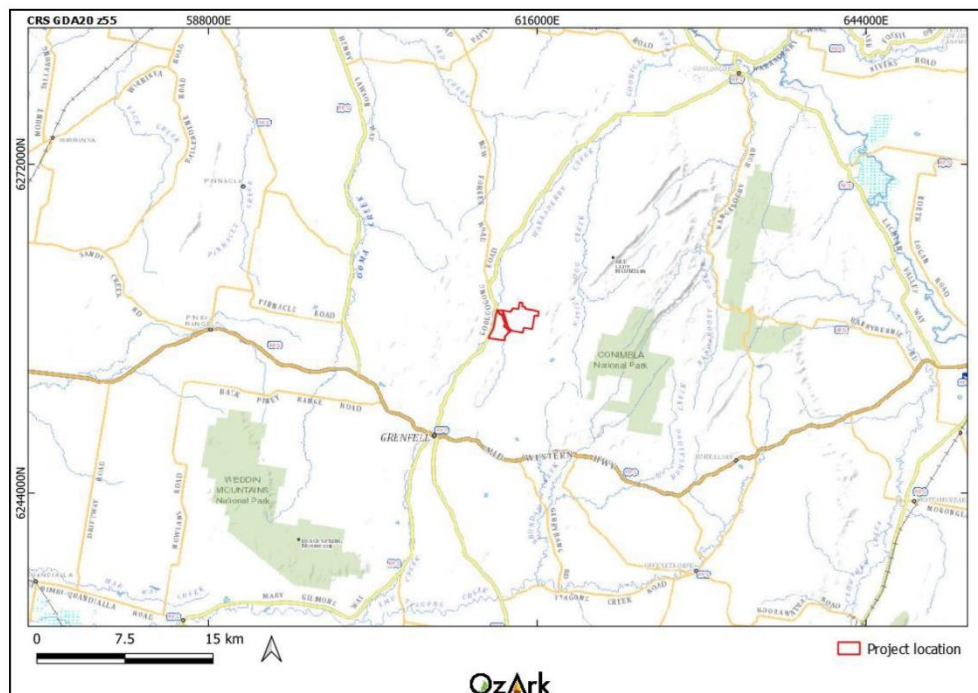
1.1 PREAMBLE

OzArk Environment & Heritage (OzArk) has been engaged by PSA Consulting (Australia) Pty Ltd on behalf of Baiada Properties Pty Ltd (the proponent) to prepare an assessment methodology for the proposed Grenfell Poultry Breeder Farm (the project). The project is located 9.4 kilometres (km) north of Grenfell and is within the Weddin Shire Council Local Government Area (Figure 1-1).

This methodology is in accordance with Stage 3 of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (ACHCRs; DECCW 2010b). The project information provided here also complies with Stage 2 of the ACHCRs.

The investigation set out in this methodology aims to identify Aboriginal cultural values, both tangible and intangible which could have potential to be impacted by the project. The results of this investigation will be presented in an *Aboriginal Cultural Heritage Assessment Report* (ACHAR).

Figure 1-1. Map showing the location of the project in relation to Grenfell.

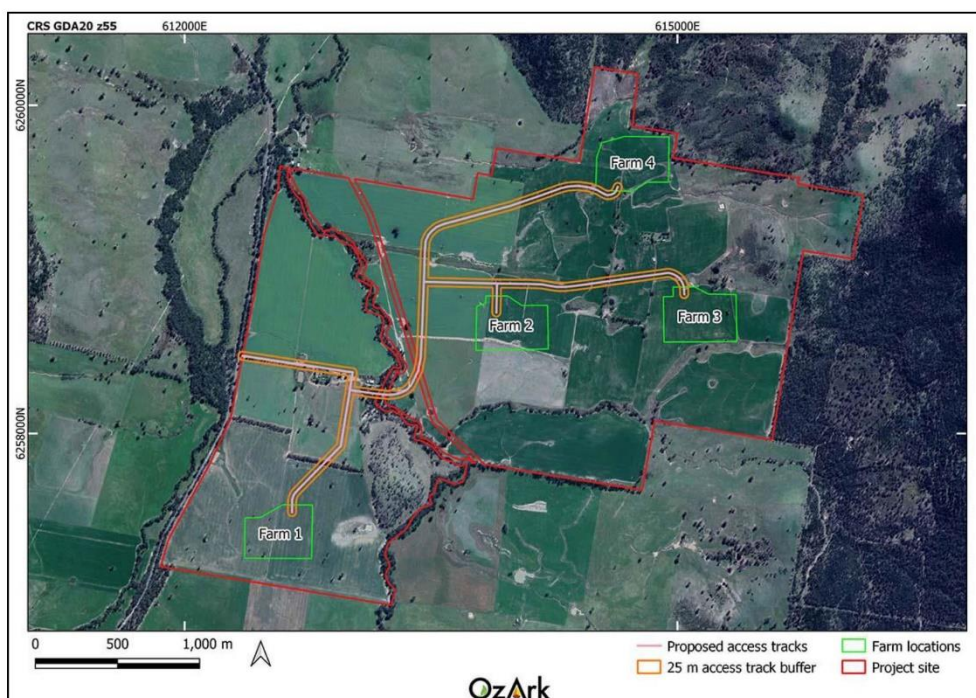


1.2 PROJECT OVERVIEW

The project will involve a poultry breeder / rearer farm, which will comprise four farms, with 10 sheds per farm giving a total of 40 poultry sheds (Figure 1-2). Each farm will house a maximum of 140,140 birds, with a maximum capacity of 560,560 birds across the project site. Each farm will have an impact footprint of approximately 5.95 hectares (ha) (approximately 170 metres [m] by 350 m).

Access to the project site will be via Goolagong Road and internal access tracks will be constructed to link the farms.

Figure 1-2: Aerial showing the study area.



1.3 PROJECT SITE

The project site is located within Lot 1 DP1022013, Lot 1–3 DP1206485 and Lot 22 DP866857 at 1130 Goolagong Road, Grenfell.

The project site encompasses approximately 598 ha of agricultural land which is zoned RU1 – Primary Production Zone under the Weddin Local Environmental Plan of 2011.

The project site slopes from the northeast to the southwest. The highest point of the project site is in the north-eastern corner at 460 m above sea level (ASL), while the lowest point is along Wallah Wallah Creek at 340 m ASL. Overall, the project site is generally flat to very gently sloping,

although there is a small, elevated area in the south that is approximately 20 m higher than the surrounding area.

The project site is intersected by the perennial watercourse Wallah Wallah Creek and Warraderry Creek flows parallel to the western boundary of the project site. In addition, numerous drainage lines associated with Wallah Wallah Creek and Warraderry Creek are within the project site.

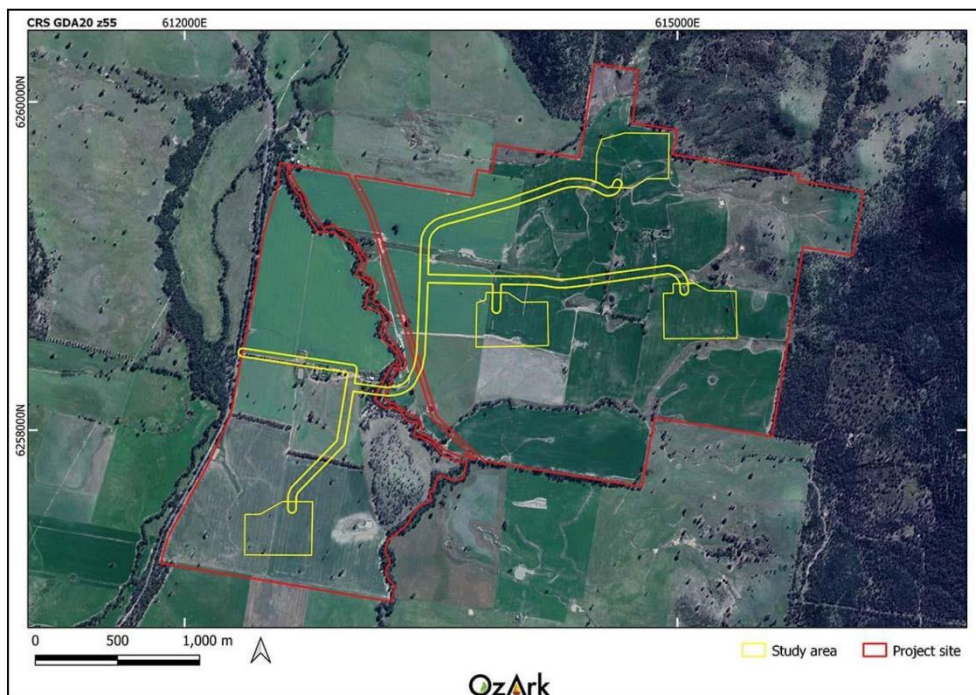
1.4 STUDY AREA

The study area for this project is limited to the four proposed farm locations and a 25 m buffer around the proposed access tracks located within the project site (Figure 1-3). The study area encompasses approximately 80 ha of land.

The study area is wholly within ploughed paddocks and includes a crossing of Wallah Wallah Creek.

Survey for the project will concentrate on the study area and not the broader project site as all impacts associated with the project will be within the study area.

Figure 1-3: Aerial showing the study area.



1.5 CONSULTATION ON THIS METHODOLOGY

Consultation for this project has followed the guidelines established in the ACHCRs (DECCW 2010b) whereby an advertisement was placed in the local press and relevant agencies were

contacted to ascertain if they were aware of groups or individuals who may have cultural knowledge of the region containing the project.

On 7 July 2021, an advertisement was placed in the *'Grenfell Record'* requesting expressions of interest in being consulted about the project. In addition, the following agencies were contacted to identify potential stakeholders for the area: Heritage NSW; the Cowra Local Aboriginal Land Council (LALC); the Office of The Registrar, ALRA; the National Native Title Tribunal; NTSCORP; the Weddin Shire Council; and the Central West Local Land Services.

As a result, the following individuals/groups registered to be consulted about the project:

- Cowra LALC
- Didge Ngunawal Clan
- Stakeholder 1
- Stakeholder 2

These individuals/groups constitute the Registered Aboriginal Parties (RAPs) for the project. Those individuals or groups who did not wish to be identified in the public documents are referred to as 'Stakeholder 1' etc.

On Tuesday 27 July 2021, all RAPs were sent information about the project and a draft of the assessment methodology. RAPs were provided the stipulated 28 days in which to review and comment on these documents as per Stage 3 of the ACHCRs. The closing date for comment was Tuesday 24 August 2021.

Responses were received from the Didge Ngunawal Clan and Stakeholder 1 on Wednesday 28 July 2021 and Monday 2 August 2021, respectively, supporting the proposed assessment methodology.

2 CULTURAL VALUES

2.1 INTRODUCTION TO CULTURAL VALUES

No matter who you are, we all have culture. Each person's culture is important; it's part of what makes us who we are.

Many Aboriginal people in Australia have a unique view of the world that is distinct from the mainstream. Land, family, law, ceremony, and language are five key interconnected elements of Aboriginal culture. For example, families are connected to the land through the kinship system, and this connection to land comes with specific roles and responsibilities which are enshrined in the law and observed through ceremony. In this way, the five elements combine to create a way of seeing and being in the world that is distinctly Aboriginal.

Fundamentally, culture is living and is not static:

- Culture is acquired - we learn about culture from others in our community, including our parents
- Culture is shared - culture does not exist in a vacuum, it is shared amongst a group of people
- Culture defines core values - because we have been taught our culture and share it with our cultural group, we tend to form the same core values
- Cultures resist change but are not static - culture does and can change, but change is usually slow and gradual.

2.1.1 Connection to Country

Aboriginal and Torres Strait Islander peoples are connected to Country through lines of descent (paternal and maternal), as well as clan and language groups.

Although in the past (and sometimes into the present) there have been conflicts between different tribal groups, these were rarely over land. Aboriginal and Torres Strait Islander people have such a strong sense of belonging to country; they have no desire to own the land of others.

Territory is defined by spiritual as well as physical links. Landforms have deep meaning, recorded in art, stories, songs, and dance. Songlines or Dreaming Tracks as well as kinship structures link Aboriginal peoples to the territories of other groups. In the past, these links were also used for trade.

"When we say Country we might mean homeland, or tribal or clan area and in saying so we may mean something more than just a place; somewhere on the map. We are not necessarily referring to place in a geographical sense. But we are talking about the whole of the landscape, not just the places on it."

Professor Mick Dodson AM, August 2007

2.1.2 Managing Country

Living on this land for more than 60,000 years, Aboriginal and Torres Strait Islander people established effective ways to use and sustain resources. One important aspect is that Aboriginal people do not see themselves as 'owning' land, animals, plants, or nature, but rather belonging with these things as equal parts of creation.

The rights of different groups to live in and manage certain areas of land are clear and recorded through art, stories, songs, and dance.

Deep cultural and spiritual values like totemism have also played an important part in Aboriginal resource management. Totemism is a belief and value system that connects human beings to other animals, plants, and aspects of nature. Groups and individuals are assigned a particular animal that they are related to and have to care for. This gives them a profound sense of connection to and responsibility for the natural world.

Aboriginal people have a wide range of traditional methods for gathering food including fish traps, subsistence agriculture, hunting and harvesting a wide range of natural fruits and vegetables. Some groups of people would stay in one place, while others moved around the land according to the seasons, to ensure sustainable and rich food supplies, and to fulfil their spiritual and cultural obligations.

Even before 1788 there were complex relationships for long distance trade between Aboriginal communities especially for coastal shells and stone hatchets. When people from different groups met socially to share resources, for ceremonies or to settle disputes, they brought items to exchange. Items included stones for hatchets, kangaroo skins, timber for spears, ochre or clay for paint, and marine shells for decoration. The exchange of objects was not motivated by a desire for wealth accumulation but a social system to build connection between people and groups.

2.1.3 Recognising lore

In Aboriginal and Torres Strait Islander communities, codes of conduct cover behaviour around:

- Leadership and etiquette
- Property
- Laws around special events like marriage, coming of age and death
- Sacred knowledge.

In much of eastern Australia, Aboriginal communities live their lives like most Australians without resorting to tribal lore. However, in certain crucial areas, particularly associated with family, leadership roles and caring for Country, Aboriginal lore continues, even in the most urbanised communities.

2.2 IDENTIFYING CULTURAL VALUES

A major aim of this assessment is to identify any cultural values within the landscape in which the Project is located so that those values can be recognised and incorporated into the management recommendations.

Any cultural values relating to the study area will be captured by the OzArk archaeologists (if such information is provided by RAPs during the survey) and included in the ACHAR.

Understanding cultural landscapes can only come from the views of a particular community, in this case, the Aboriginal community. Unless informed, OzArk will not know of the community's feelings towards the cultural landscape surrounding the project site or whether the survey methodology set out in **Section 4** needs to respond to cultural heritage concerns. OzArk, therefore, invites any information on the cultural landscape surrounding the project site to be forwarded to OzArk, either by telephone or mail or e-mail. Any information received will be treated according to the conditions set out in **Sections 2.2.1 to 2.2.3**.

2.2.1 Use of information collected

An ACHAR will be prepared for the Project which articulates Aboriginal cultural values and associated conservation methods across the study area, as identified during the consultations. The ACHAR will be circulated to all RAPs for comment as is set out in the ACHCRs. The ACHAR will be considered by Heritage NSW when determining whether the Project should be approved. The report will be publicly available.

2.2.2 Public / confidential information

Information will be treated in accordance with instructions received by Aboriginal informants. Information described as confidential (culturally sensitive) will not be detailed in the publicly available report. Confidential information should be made available to the proponent, its heritage consultants, and Heritage NSW so that significant cultural values can be conserved. On advice from the provider of the information, a redacted ACHAR would be made available to the wider public where any sensitive cultural information is removed.

2.2.3 Copyright

Information collected for this assessment remains the property of the Aboriginal informants and the author. Without written permission from individual informants and the author information may not be used for purposes other than those outlined above.

3 ARCHAEOLOGICAL CONTEXT

3.1 REGIONAL ARCHAEOLOGICAL CONTEXT

There are several of broad scale regional archaeological studies or development driven studies which are in general region of the study area. These studies have been summarised below.

3.1.1 Witter 1992

Witter (1992) undertook research for his PhD thesis in the Upper Lachlan River area to the southeast of the current study area near Cowra. The focus was the economies of the prehistoric riverine groups who inhabited the region. His results provide a framework for the interpretation of the local archaeology including the following contextual points:

- Campsites and stone tool assemblages of the Cowra–Lachlan River area tend to reflect occupation patterns consistent with the broader tablelands region
- Artefact assemblages of the area include components of the Core and Flake tradition dating to c. 12,000-14,000 years before present
- Quartz was the predominant raw material utilised in the region
- Occupation sites tend to occur most frequently along perennial watercourses, springs, and soaks.

3.1.2 Appleton 1993

Appleton (1993) completed an archaeological assessment of five optic cable routes in the Grenfell region. The closest assessment area to the current study area was the Grenfell to Ooma route, located 11 km west of the study area. This route was 31.5 km long and followed Henry Lawson Way. The topography consisted mostly of flat plains intersected by numerous ephemeral waterways and gullies. Two sites were identified along the route, including an isolated find and a low-density artefact scatter. The isolated find was a broken chert flake located along Ooma Creek. The artefact scatter included 15 artefacts along a 290 m stretch of Ooma Creek and included artefacts manufactured predominately from chert.

3.1.3 Kelton Developmental Driven Reports in Forbes Region from 1994–1996

During the 1990s, Kelton (1994a, 1994b, 1995a, 1995b, and 1996) recorded at least 14 scarred trees, five isolated finds and two open sites associated with gilgai landforms. As a result of these studies, Kelton postulated that scarred trees were commonly located within road corridors and public lands due to the fact that Aboriginal people were restricted to such areas during the historical period (Kelton 1996¹). One of these studies by Kelton (1995a) was an assessment for

¹ While OzArk notes Kelton's observation, the fact that scarred trees are recorded in road corridors and public land probably has more to do with the fact that this is where remnant vegetation has survived.

the Anglesey Rural subdivision, located in Cowra, approximately 40 km east of the study area. During the survey, Kelton (1995a) recorded six Aboriginal sites: two artefact scatters and four isolated finds. The artefacts consisted of yellow/brown chert flakes, silcrete, and quartz. The flaked artefacts had evidence of retouch, crushing, striking platforms, negative scars, and bulbs of percussion. Kelton also recorded small termite nest hearth stones at one of the artefact scatters. Kelton concluded that the sites recorded during the survey reflected occasional occupation (1995a: 17).

3.1.4 Oakley 1997

In 1997, Oakley completed a heritage assessment for the two optic fibre cable routes. One alignment extended from 3 km through Forbes to the New Grenfell Road and the other extended for 20 km along Henry Lawson Way towards Grenfell. Three Aboriginal sites were identified during the survey along Henry Lawson Way. This included two scarred trees and a low-density artefact scatter. The artefact scatter was recorded within an exposure adjacent to Ooma Creek and consisted of 10 artefacts. Artefacts included flakes manufactured from silcrete, quartz, fine-grained siliceous stone, and volcanic materials.

3.1.5 Knight 2001

Knight (2001) undertook research for a Masters thesis on the Weddin Mountains and surrounding areas, located 21 km to the southwest of the study area. Knight completed surveys across the areas over several months in 1996 and 1997. The assessment area was divided into four quadrants surrounding the Weddin Mountains, including:

- NW – land northwest of Weddin, including the Wah Way Plain, the gilgai around Caragabal, rolling to hilly land south of the Wheoga Range and the Garema Plain to the north
- SW – the southern half of The Levels, land dominated by Curraburrama and Eurabba Plains and their creek systems including lower Burrangong, Bribbaree and the middle reaches of the Bland, and Weedallion Mountain
- NE – plains adjacent to Ooma Creek, the Bogolong Hills and the rolling terrain around Grenfell
- SE – rolling to hilly terrain to the north and northeast of Young, the plains along the middle reaches of Burrangong Creek and Tyagong Creek and the Bribbaree Hills.

A total of 221 Aboriginal sites were recorded. The site types and quadrants within which they were identified are shown in **Table 3-1**.

Table 3-1: Number of sites recorded in relation to the survey quadrants.

Survey quadrant	Isolated finds	Artefact scatters	Shelters with artefacts	Stone arrangements	Scarred trees	Total
NW	20	38	0	0	7	65
SW	9	18	0	0	1	28
NE	4	21	0	0	2	27
SE	0	13	0	0	0	13
Weddin Mountains	17	67	3	1	0	88
Total	50	157	3	1	10	221

Findings from the assessment are as follows:

- Weddin Mountains:
 - 77% of sites were identified on the flanks of the mountains with only 23% recorded within mountain landscapes
 - Artefact scatters ranged in size from two to 200 artefacts. Most sites comprised approximately 12 artefacts
 - The largest site (VWV8) was located on an elevated landform between Basin Gully and Black Gin Gully
 - All sites were identified within 500 m of a potential water sources.
- Surrounding Slopes and Plains (NW, SW, NE and SE quadrants):
 - 50% of sites were recorded in the NW quadrant
 - Scarred trees were recorded almost exclusively on the plains of the NW quadrant
 - Artefact scatters ranged in size from 2 to 149 artefacts. Scatters on average comprised 15 artefacts and the average site area is 150 square metres.

3.1.6 OzArk 2015

OzArk (2015) completed an archaeological assessment on the Mid Western Highway within the Weddin, Cowra and Blayney LGAs. Area 1 extended from Blayney to Cowra; Area 2 extended from Cowra to Grenfell, and Area 3 extended from Grenfell to the Newell Highway. Areas 2 and 3, closest to the study area, were comprised of gently undulating to flat landforms. Three Aboriginal sites were identified during the survey, all in Area 3. Sites included two scarred trees and an artefact scatter with an associated scarred tree. The artefact scatter consisted of two flakes manufactured from a volcanic material and was located along a drainage line of Carabagal Creek.

3.2 LOCAL ARCHAEOLOGICAL CONTEXT

A search of the Heritage NSW administered Aboriginal Heritage Information Management System (AHIMS) database on 9 July 2021 returned 47 results for Aboriginal sites within a 40 km

by 40 km area centred over the study area (GDA Zone 55 Eastings: 593972–633972; Northings: 6238809–6278809) (see **Table 3-2** for site types and frequencies). **Figure 3-1** shows the location of the AHIMS sites in relation to the study area.

Table 3-2: AHIMS site types and frequencies

Site Type	Number	% Frequency
Scarred trees	24	51%
Artefact scatter	17	36%
Isolated find	3	6%
Artefact scatter and scarred tree	1	2%
Bora/ceremonial and stone arrangement	1	2%
Water hole/well	1	2%
Total	47	100

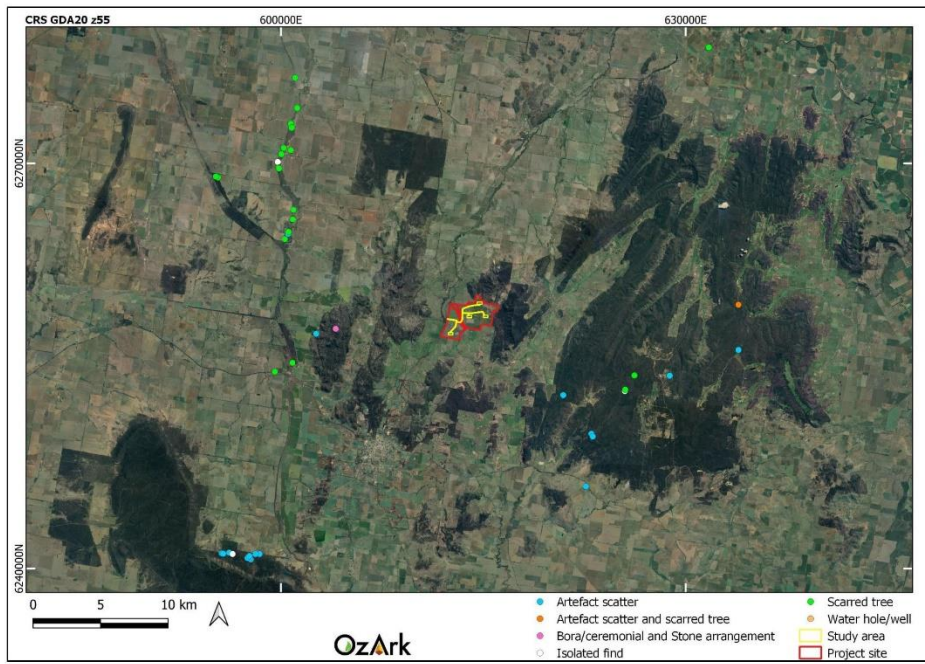
The most frequently recorded site type is scarred trees contributing to 51% of the sites within the search area. Other site types include artefact scatters (36%) and isolated finds (6%), with artefact scatter and scarred tree, Bora/ceremonial site and stone arrangement and waterhole/well site also present, but in much lower frequencies (2% for each).

3.3 ARCHAEOLOGICAL CONTEXT: CONCLUSION

The archaeological investigations surrounding the study area as summarised in **Section 3.1** indicate that:

- Artefact scatters and scarred trees are common site types
- Scarred trees are likely to be identified across the plains, and can be identified at variable distances to water
- Water is an important determinant in site location. Elevated landforms with access to permanent or semi-permanent water are favourable site locations, but sites also occur on flats
- Minor tributaries and gilgai attracted activity, possibly due to the lower frequency of permanent water sources in the immediate area
- Artefact scatters are more likely to be of low-density along named creek lines, averaging around 10 to 15 artefacts
- Artefacts are most likely to be manufactured from chert, quartz, and volcanic materials.

Figure 3-1: AHIMS sites in relation to the study area.



3.4 PREDICTIVE MODEL

Based on knowledge of the environmental contexts of the study area and a desktop review of the known local and regional archaeological record, the following predictions are made concerning the probability of those site types being recorded:

- **Isolated finds:** can occur anywhere, particularly within disturbed contexts, it is predicted that this site type could be recorded within the study area. It is noted in **Section 3.2** that isolated finds have been recorded in the region, although at a low rate.
- **Artefact scatters:** artefact distributions of variable artefact densities have been recorded in the region (see **Section 3.2**). Artefact scatters in the region have generally been recorded along named creek lines or on the footslopes and spurs of ridgelines. Within the study area, artefact scatters are most likely to be located on the banks of Wallah Wallah Creek or along the drainage lines. Any artefact scatters are likely to be of low-density and comprised of artefacts manufactured predominately from quartz, chert, and volcanic materials.
- **Scarred trees:** are the most commonly recorded site type within 40 km of the study area, accounting for 51% of the recorded site types. Scarred trees in this area are generally located on the plains or gently sloping landforms such as those within the study area. However, this site type is unlikely to be identified within the study area as it has been cleared for grazing and farming activities. Should this site type be recorded, it will most likely be along the riparian corridor of Wallah Wallah Creek, if trees of a sufficient age remain.
- **Quarry sites and stone procurement sites:** this site type could be recorded within the study area should suitable rock outcroppings be available. However, due to the absence of previously recorded quarry sites and the aerial imagery of the landforms within the study area it is considered unlikely this site type will be encountered.
- **Burials:** are generally found in elevated sandy contexts or in association with rivers and major creeks. No such landforms exist with the study area and therefore such sites are unlikely to occur.
- **Bora/Ceremonial sites:** this site type does not necessarily follow landform predictability and are more likely to be identified by local Aboriginal people, rather than through archaeological evidence. These sites are generally identified through consultation with the Aboriginal community.

3.5 RESEARCH QUESTIONS

A number of research questions can meaningfully be applied to the investigation of the study area. These research questions include:

- What resources were available to the Aboriginal people using the land within the study area (food, stone and water) and what resources were transported to the area?
- How do the raw materials recorded within the study area compare to those in recorded in the surrounding region?

- Establish how the findings within the study area (if any) accord with the regional archaeological context examined in **Section 3.1**.

The survey methodology set out in **Section 4** will be framed to help answer these questions; should sites of sufficient significance be encountered. However, based on the results of previous assessments and past disturbances, it is not expected that the land within the study area will contain sites of sufficient significance to help answer those research questions that require a robust data set.

4 SURVEY METHODOLOGY

4.1 ASSESSMENT APPROACH

The Aboriginal cultural heritage assessment of the study area will follow the *Code of Practice for the Investigation of Aboriginal Objects in New South Wales* (Code of Practice; DECCW 2010b). The field inspection will follow the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales* (the Guide; OEH 2011).

The survey for Aboriginal cultural heritage values will concentrate on the study area. All impacts associated with the project will be located within the study area.

4.2 SURVEY AIMS

The aim of any archaeological survey is not to locate each artefact in a landscape but to undertake investigations so that the archaeological potential and archaeological characteristics of all landforms within the study area are known. Therefore, the aims of the survey will be to:

- Inspect all landforms in the study area so that their archaeological potential can be determined
- Evaluate whether the predictive model set out in **Section 3.4** is valid
- Determine if the research questions set out in **Section 3.5** can be answered
- Determine if any landforms of the study area require test excavation to understand the archaeological potential at a particular location
- Undertake sufficient assessment to satisfy Sections 2.2, 2.4, 2.5, 2.6, and 2.7 in the Guide
- Collect sufficient data so that the results can be presented in an ACHAR as set out in Section 3 in the Guide
- Undertake survey and record keeping satisfying Requirements 1–13 of the Code of Practice.

4.3 SURVEY METHODOLOGY

Standard archaeological field survey and recording methods will be employed in this assessment (Burke & Smith 2004) and will follow the Code of Practice.

The study area will be assessed by pedestrian survey covering the entire study area. Surveyors will be spaced approximately 10 to 15 m apart. Where areas of exposure are present, or in proximity to areas with higher archaeological potential, this spacing will be reduced.

In the field, OzArk staff, with the assistance of RAPs, will record and evaluate physical (i.e. archaeological) evidence. Site recording will capture all the information required to complete

current AHIMS site recording forms (e.g. site location, site boundary, site plan, representative photographs, artefact recording and feature recording).

Apart from their valuable experience in recognising and recording archaeological sites, the RAP representatives will be able to acquaint themselves with the study area in order to inform the cultural values assessment.

4.4 TEST EXCAVATION


It is possible that the survey may identify landforms where test excavation under the Code of Practice (Requirements 14–17) is required. Should such landforms be identified during the survey, the test excavation methodology will be prepared as a separate document that will be circulated to all RAPs for review and comment.

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- Kelton 1995a Kelton J. 1995. *Archaeological Survey for the Proposed "Anglesey" Rural Sub-Division, Bogan Gate Road, Forbes, NSW*. Report for Mr B. Adams, Forbes, in association with Development Consultants, Hoynes Wheeler and Thorne Pty. Ltd.
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- Witter 1992 Witter, D. 1992. *Regions and Resources*. Unpublished PhD thesis. Dept of Prehistory and Anthropology, ANU, Canberra.

Appendix 1 Figure 8: Stage 4 letters to RAPs.

	<p style="text-align: center;">OzArk Environment & Heritage</p> <p>Dubbo T: 02 6882 0118</p> <p>Queanbeyan enquiry@ozarkehm.com.au</p> <p>Newcastle www.ozarkehm.com.au</p>	<p>ABN 59 104 582 354</p> <p>145 Wingewarra St</p> <p>PO Box 2069</p> <p>DUBBO NSW 2830</p>
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14th September 2021

Members
 Cowra Local Aboriginal Land Council
 12-18 Young Road
 Cowra NSW 2794
 cowralalc@gmail.com

ABORIGINAL HERITAGE ASSESSMENT FOR THE GRENFELL POULTRY FARM, GRENFELL NSW

Dear Members,

Thank-you for your continued participation as a Registered Aboriginal Party (RAP) and involvement in the above-mentioned project.

Baiada Properties Pty Limited (the Proponent) would like to offer you the opportunity to provide feedback on the draft *Aboriginal Cultural Heritage Assessment Report* (ACHAR) in accordance with Stage four (4) of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (ACHCR).

As per the ACHCRs we are required to give you twenty-eight (28) days to supply feedback on the attached ACHAR. This period closes on the **Wednesday 13th October 2021**. Should our office not be contacted within this time frame, we will presume that you are satisfied with the contents of the report as it stands.

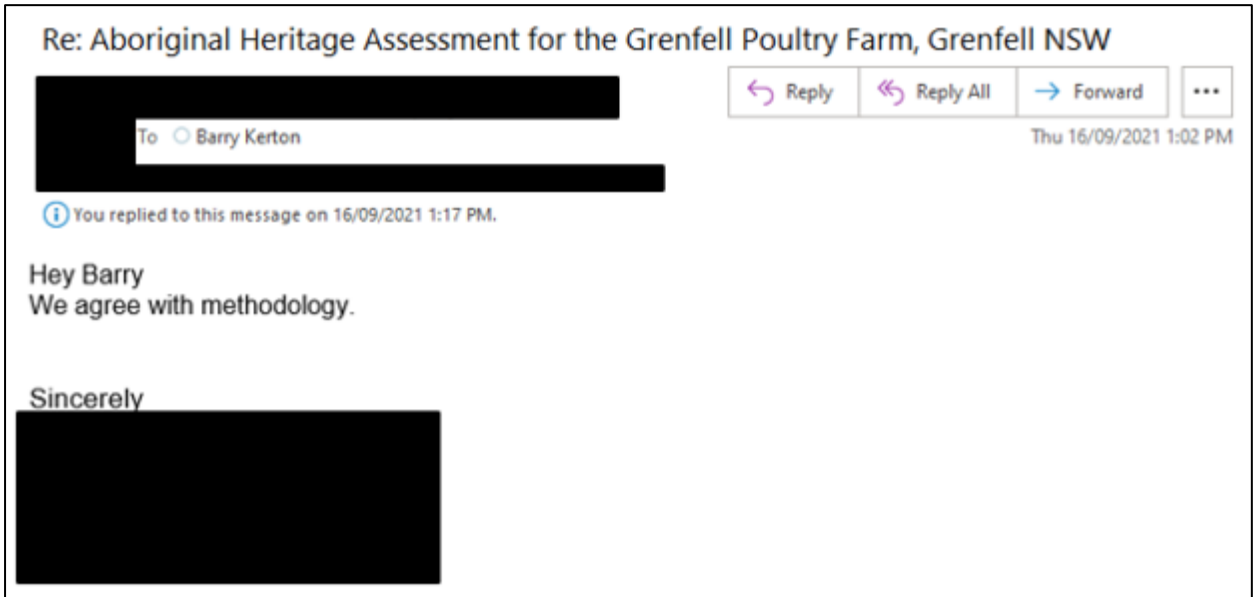
If you need any help supplying feedback or have any queries, please do not hesitate to contact our office on (02) 6882 0118 or at barry@ozarkehm.com.au.

Kind regards,

Barry Kerton

Barry Kerton
Archaeologist

Appendix 1 Figure 9: Stage 4 responses and feedback from RAPs.



APPENDIX 2: AHIMS SEARCH RESULT

NSW Office of Environment & Heritage		AHIMS Web Services (AWS) Extensive search - Site list report						Your Ref/PO Number : 2893 Client Service ID : 605249		
SiteID	SiteName	Datum	Zone	Eastings	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
43-6-0087	BC-OS-1	AGD	55	620810	6252660	Open site	Valid	Artefact :-		
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd					Permits		
43-6-0083	Maudry State Forest	AGD	55	595221	6268769	Open site	Valid	Modified Tree (Carved or Scarred) :- 1		
	Contact	Recorders	Miss.Rebecca Ogden-Brunell					Permits		
43-6-0084	Maudry State Forest 2	AGD	55	595060	6268835	Open site	Valid	Modified Tree (Carved or Scarred) :- 1		
	Contact	Recorders	Miss.Rebecca Ogden-Brunell					Permits		
43-6-0085	Maudry State Forest 3	AGD	55	595067	6268835	Open site	Valid	Modified Tree (Carved or Scarred) :- 1		
	Contact	Recorders	Miss.Rebecca Ogden-Brunell					Permits		
43-6-0086	Hency Lawson Way 1,2,3	AGD	55	600180	6264206	Open site	Valid	Modified Tree (Carved or Scarred) :- 3		
	Contact	Recorders	Miss.Rebecca Ogden-Brunell					Permits		
43-6-0032	GG-ST-1 Gooloogong, Grenfell Road	AGD	55	631600	6278400	Open site	Valid	Modified Tree (Carved or Scarred) :- -	Scarred Tree	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd					Permits		
43-6-0088	CC-OS-1/Commbila NP	AGD	55	633800	6256000	Open site	Valid	Artefact :-		
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd					Permits		
43-6-0006	Driftway,Bogalong;	AGD	55	603948	6257572	Open site	Valid	Water Hole :-	Water Hole/Well	
	Contact	Recorders	ASRSYS					Permits		
43-6-0007	Driftway,Bogalong;	AGD	55	603948	6257572	Open site	Valid	Ceremonial Ring (Stone or Earth) :-, Stone Arrangement :-	Bora/Ceremonial,Stone Arrangement	
	Contact	Recorders	ASRSYS					Permits		
43-6-0008	Ooma Creek;	AGD	55	600622	6270790	Open site	Valid	Modified Tree (Carved or Scarred) :- -	Scarred Tree	
	Contact	Recorders	ASRSYS					Permits		
43-3-0020	Ooma Creek Ja1;	AGD	55	600430	6264600	Open site	Valid	Artefact :-	Open Camp Site	2929
	Contact	Recorders	Mr John Appleton					Permits		
43-6-0016	Ooma Creek;JA 2;	AGD	55	599650	6269920	Open site	Valid	Artefact :-	Isolated Find	2629
	Contact	Recorders	Mr John Appleton					Permits		

Report generated by AHIMS Web Service on 09/07/2021 for Stephanie Rusden for the following area at Datum :GDA, Zone :55, Eastings :593972 - 633972, Northings :6238809 - 6278809 with a Buffer of 0 meters. Additional Info : Survey. Number of Aboriginal Sites and Aboriginal objects found is 47

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NSW Office of Environment & Heritage		AHIMS Web Services (AWS) Extensive search - Site list report						Your Ref/PO Number : 2893 Client Service ID : 605249		
SiteID	SiteName	Datum	Zone	Eastings	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
43-6-0018	Major West Road;OS-1;MWR;OS-1;	AGD	55	628700	6254100	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd					Permits		
43-6-0045	Bogalong;	AGD	55	602500	6257200	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Bill Allen					Permits		
44-5-0083	KC-IF-1;	AGD	55	625380	6252960	Open site	Valid	Artefact :-	Isolated Find	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd					Permits		
43-6-0049	I-OS-1;	AGD	55	633800	6259350	Open site	Valid	Artefact :-, Modified Tree (Carved or Scarred) :-	Open Camp Site, Scarred Tree	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd					Permits		
43-6-0052	Keewong Creek OS 1;	AGD	55	622900	6249800	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Bill Allen					Permits		
43-6-0053	Keewong Creek OS 2;	AGD	55	623000	6249600	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Bill Allen					Permits		
43-6-0055	WE1;Weddin Mountains National Park;	AGD	55	595490	6240950	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Tom Knight					Permits		
43-6-0056	WE2;Weddin Mountains National Park;	AGD	55	595600	6240920	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Tom Knight					Permits		
43-6-0057	WE3;Weddin Mountains National Park;	AGD	55	596050	6241000	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Tom Knight					Permits		
43-6-0058	WE4;Weddin Mountains National Park;	AGD	55	596300	6240900	Open site	Valid	Artefact :-	Isolated Find	
	Contact	Recorders	Tom Knight					Permits		
43-6-0059	WE5;Weddin Mountains National Park;	AGD	55	598300	6240900	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Tom Knight					Permits		
43-6-0060	WE6;Weddin Mountains National Park;	AGD	55	598000	6240900	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Tom Knight					Permits		
43-6-0061	WE7;Weddin Mountains National Park;	AGD	55	597650	6240500	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Tom Knight					Permits		
43-6-0062	WE8;Weddin Mountains National Park;	AGD	55	597550	6240550	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Tom Knight					Permits		
43-6-0063	WE9;Weddin Mountains National Park;	AGD	55	597410	6240600	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Tom Knight					Permits		
43-6-0064	WE10;Weddin Mountains National Park;	AGD	55	597550	6240750	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Tom Knight					Permits		
44-4-0044	Belmont Springs;Open scatter (BSOC1);	AGD	55	622500	6245900	Open site	Valid	Artefact :-	Open Camp Site	

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SiteID	SiteName	Datum	Zone	Eastings	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
43-6-0109	Grenfell-Forbes road scar tree	GDA	55	600859	6255237	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Peter Peckham							
43-6-0112	HW6-ST1	GDA	55	599554	6254571	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Mr.Nicholas James Harrop							
43-6-0075	Conimbla Park Scarred Tree 1	AGD	55	626092	6254116	Open site	Valid	Modified Tree (Carved or Scarred) ; 1		
	Contact	Recorders								
			April Blair							
43-6-0076	Conimbla Park Scarred Tree 2	AGD	55	625407	6253062	Open site	Valid	Modified Tree (Carved or Scarred) ; 1		
	Contact	Recorders								
			April Blair							
43-6-0108	Scared Tree 108	AGD	55	600766	6265688	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Mr.Graeme Towney							
43-6-0106	Dubble sided tree TSR	AGD	55	600450	6264743	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Mr.Graeme Towney							
43-6-0107	Scaredtree107	AGD	55	600765	6265666	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Mr.Graeme Towney							
43-6-0102	Scared Red Gum	AGD	55	600092	6270951	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Mr.Graeme Towney							
43-6-0103	Dead Box	AGD	55	599698	6269481	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Mr.Graeme Towney							
43-6-0104	Dead Redgum	AGD	55	599743	6269430	Open site	Valid	Modified Tree (Carved or Scarred) ; -		

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SiteID	SiteName	Datum	Zone	Eastings	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
43-6-0105	Grenfell TSR	AGD	55	600819	6266377	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Mr.Graeme Towney							
43-6-0096	Modified Tree	AGD	55	600937	6276154	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Mr.Graeme Towney							
43-6-0097	Scared Tree Henary Lawson way	AGD	55	601092	6273911	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Mr.Graeme Towney							
43-6-0098	Scared Tree Grenfell Rd	AGD	55	600617	6272799	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Mr.Graeme Towney							
43-6-0099	Scared Box Tree	AGD	55	600623	6272736	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Mr.Graeme Towney							
43-6-0100	Two sided scared tree	AGD	55	600731	6272477	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Mr.Graeme Towney							
43-6-0101	Scared tree 101	AGD	55	600681	6272442	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Mr.Graeme Towney							
43-6-0115	Nangwarric1	GDA	55	600028	6270678	Open site	Valid	Modified Tree (Carved or Scarred) ; -		
	Contact	Recorders								
			Mr.Larry Towney,Central Tablelands Local Land Services - Orange							

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