

# APPENDIX C Aboriginal Due Diligence Assessment Report



View south across the study area.

# **ABORIGINAL DUE DILIGENCE ASSESSMENT REPORT**

# **NARROMINE FREIGHT HUB**

NARROMINE, NSW May 2023

> Report prepared by OzArk Environment & Heritage for Narromine Shire Council



# OzArk Environment & Heritage

145 Wingewarra St (PO Box 2069) Dubbo NSW 2830

Phone: (02) 6882 0118 Fax: (02) 6882 0630 enquiry@ozarkehm.com.au www.ozarkehm.com.au This page has intentionally been left blank.

# **DOCUMENT CONTROLS**

Proponent	Narromine Shire	Council					
Client	Barnson						
Document Description	Aboriginal Due D	iligence Assessment Report: Narromine Freight Hub					
File Location	OzArk Job No.						
Clients\Barnson\Narromine Freight Hub March 2023\Report	3799	3799					
Document Status: V3.0 Final		Date: 30 May 2023					
		V1.0 JH author 17/3/23					
Draft V1: OzArk internal edits		V1.1 SR review 10/5/23					
		V1.2 JH amend 11/5/23					
Draft V2: OzArk and client edits		V2.0 to client 12/5/23					
Final V3: Final document		V3.0 to client 30/5/23					
Prepared for		Prepared by					
Jim Sarantzouklis		Jordan Henshaw					
Director		Archaeologist					
Barnson		OzArk Environment & Heritage					
1/36 Darling Street		145 Wingewarra Street (PO Box 2069)					
Dubbo NSW 2830		Dubbo NSW 2830					
jim@barnson.com.au		P: 02 6882 0118					
		jordan@ozarkehm.com.au					

COPYRIGHT

© OzArk Environment & Heritage 2023 and © Narromine Shire Council 2023

All intellectual property and copyright reserved.

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.

Enquiries should be addressed to OzArk Environment & Heritage.

#### Acknowledgement

OzArk acknowledge the traditional custodians 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.

### **EXECUTIVE SUMMARY**

OzArk Environment & Heritage (OzArk) has been engaged by Barnson (the client), on behalf of Narromine Shire Council (the proponent) to complete an Aboriginal due diligence heritage assessment for the Narromine Freight Hub (the proposal). The proposal is in the Narromine Shire Council Local Government Area.

The study area is on the "Craigie Lea" property, located approximately nine kilometres (km) south of Narromine in central western NSW. It extends from the corner of Cragie Lea Lane and Tomingley Road 1.8 km west and 650 metres (m) south respectively and includes northern sections of Lot 232 and Lot 233 DP755131.

The desktop component of the due diligence assessment confirmed there are no previously recorded Aboriginal sites within the study area and all the study area, excluding the corridors of Cragie Lea Lane, meet the definition of 'disturbed land'.

A visual inspection of the study area was along the corridors of Cragie Lea Lane was undertaken by OzArk Archaeologist, Imogen Crome, on 26 April 2023. The visual inspection assessed all mature trees within the corridors for cultural modifications. No landforms with subsurface archaeological potential were identified.

The undertaking of the due diligence process has resulted in the conclusion that the proposed works will have an impact on the ground surface, however, no Aboriginal objects or intact archaeological deposits will be harmed by the proposal. This moves the proposal to the following outcome:

Aboriginal Heritage Impact Permit application not necessary. Proceed with caution. If any Aboriginal objects are found, stop work, and notify Heritage NSW (02) 9873 8500 (heritagemailbox@environment.nsw.gov.au). If human remains are found, stop work, secure the site and notify NSW Police and Heritage NSW.

To ensure the greatest possible protection to the area's Aboriginal cultural heritage values, the following recommendations are made:

- 1) The proposed work may proceed at the study area without further archaeological investigation under the following conditions:
  - a) All land and ground disturbance activities must be confined to within the study area, as this will eliminate the risk of harm to Aboriginal objects in adjacent landforms. Should the parameters of the proposal extend beyond the assessed areas, then further archaeological assessment may be required.
  - b) All staff and contractors involved in the proposed work should be made aware of the legislative protection requirements for all Aboriginal sites and objects.

- 2) This assessment has concluded that there is a low likelihood that the proposed work will adversely harm Aboriginal cultural heritage items or sites. If during works, however, Aboriginal artefacts or skeletal material are noted, all work should cease and the procedures in the Unanticipated Finds Protocol (Appendix 2) should be followed.
- 3) Inductions for work crews should include a cultural heritage awareness procedure to ensure they recognise Aboriginal artefacts (Appendix 3) and are aware of the legislative protection of Aboriginal objects under the National Parks & Wildlife Act 1974 and the contents of the Unanticipated Finds Protocol.
- 4) The information presented here meets the requirements of the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales. It should be retained as shelf documentation for five years as it may be used to support a defence against prosecution in the event of unanticipated harm to Aboriginal objects.

# CONTENTS

EXECUTI	VE SUMMARYIII
1 INTE	RODUCTION1
1.1	Brief description of the proposal1
1.2	Background1
1.3	Study area1
1.4	Assessment approach2
2 Авс	ORIGINAL DUE DILIGENCE ASSESSMENT
2.1	Introduction
2.2	Defences under the NPW Regulation 2019
2.2.1	Low impact activities
2.2.2	Disturbed lands3
2.3	Application of the Due Diligence Code of Practice to the proposal
2.3.1	Step 16
2.3.2	Step 2a6
2.3.3	Step 2b7
2.3.4	Step 2c
2.3.5	Step 3 11
2.3.6	Step 4 11
2.4	Conclusion
3 MAN	AGEMENT RECOMMENDATIONS14
Referen	NCES15
PLATES.	
	x 1: AHIMS SEARCH RESULTS
	x 2: Aboriginal Heritage: Unanticipated Finds Protocol
	x 3: Aboriginal Heritage: Artefact Identification

# **FIGURES**

Figure 1-1. Map showing the location of the proposal	. 1
Figure 1-2: Aerial showing the study area	.2
Figure 2-1: 1981 aerial showing historic disturbances within the study area	.4
Figure 2-2: Aerial of the study area showing portions defined as 'disturbed land'	. 5
Figure 2-3: Previously recorded sites in relation to the study area	. 7
Figure 2-4: 2021 survey coverage within the current study area	10
Figure 2-5: Survey coverage along the northern boundary of the study area	12

# TABLES

Table 2-1: Determination of whether Due Diligence Code of Practice applies.	5
Table 2-1: Site types and frequencies of AHIMS sites near the study area	7
Table 2-3: Due Diligence Code of Practice application	13

# **1** INTRODUCTION

## **1.1 BRIEF DESCRIPTION OF THE PROPOSAL**

OzArk Environment & Heritage (OzArk) has been engaged by Barnson (the client), on behalf of Narromine Shire Council (the proponent) to complete an Aboriginal due diligence heritage assessment for the Narromine Freight Hub (the proposal). The proposal is in the Narromine Shire Council Local Government Area (LGA) (**Figure 1-1**).





# 1.2 BACKGROUND

In 2021, OzArk completed a preliminary Aboriginal heritage assessment for a rail manufacturing or storage facility. The assessment included Lot 16, 17, 232 and 233 DP755131 (encompassing the current study area). One low density artefact scatter was recorded during the inspection along the southern boundary of Lot 17 DP755131, located 2.2 km from the current study area (OzArk 2021).

# 1.3 STUDY AREA

The study area is on the "Craigie Lea" property located approximately nine kilometres (km) south of Narromine in central western NSW. It extends from the corner of Cragie Lea Lane and Tomingley Road, 1.8 km west and 650 metres (m) south respectively and includes the northern

sections of Lot 232 and 233 DP755131. The study area is located approximately 1.8 km east of the north-south Parkes to Narromine (P2N) rail corridor and north of the approved Narromine to Narrabri (N2N) section of Inland Rail.

The study area is shown on Figure 1-2.





## **1.4** ASSESSMENT APPROACH

The desktop and field assessment of the study area follows the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (due diligence; DECCW 2010).

## 2 ABORIGINAL DUE DILIGENCE ASSESSMENT

#### 2.1 INTRODUCTION

Section 57 of the National Parks and Wildlife Regulation 2019 (NPW Regulation) made under the *National Parks and Wildlife Act 1974* (NPW Act) advocates a due diligence process to determining likely impacts on Aboriginal objects. Carrying out due diligence provides a defence to the offence of harming Aboriginal objects and is an important step in satisfying Aboriginal heritage obligations in NSW.

## 2.2 DEFENCES UNDER THE NPW REGULATION 2019

#### 2.2.1 Low impact activities

The first step before application of the due diligence process itself is to determine whether the proposed activity is a "low impact activity" for which there is a defence in the NPW Regulation. The exemptions are listed in Section 58 of the NPW Regulation (DECCW 2010: 6).

The activities of the proponent do not fall under 'low impact activity' as earthworks required for the construction of the proposal are not listed in the NPW Regulation. Therefore, the due diligence process must be applied.

#### 2.2.2 Disturbed lands

Relevant to this process is the assessed levels of previous land-use disturbance.

The NPW Regulation Section 58 (DECCW 2010: 18) define disturbed land as follows:

Land is disturbed if it has been the subject of a human activity that has changed the land's surface, being changes that remain clear and observable.

Examples include ploughing, construction of rural infrastructure (such as dams and fences), construction of roads, trails and tracks (including fire trails and tracks and walking tracks), clearing vegetation, construction of buildings and the erection of other structures, construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure) and construction of earthworks.

Aerial imagery from 1981 shows the portions of the study area within Lot 232 and 233 DP755131 have been cleared and ploughed, although isolated trees were present at this date along the southern boundary of Lot 233 DP755131 (**Figure 2-1**). A dam has also been constructed in the western portion of this lot. As such, these areas have been disturbed in a clear and observable manner and the due diligence process does not need to be applied to this area. Areas of 'disturbed land' are shown on **Figure 2-2**.

The northern boundary of the study area has been disturbed by the construction of the Craigie Lea Lane, although trees remain within the road corridors indicating that the land's surface in those corridors have not been changed in a clear and observable manner and the due diligence process must be applied.



Figure 2-1: 1981 aerial showing historic disturbances within the study area.



Figure 2-2: Aerial of the study area showing portions defined as 'disturbed land'.

In summary, it is determined that the proposal must be assessed under the Due Diligence Code of Practice. The reasoning for this determination is set out in **Table 2-1**.

Item	Reasoning	Answer
Is the activity to be assessed under Division 4.7 (state significant development) or Division 5.2 (state significant infrastructure) of the EP&A Act?	The proposal will be assessed under Part 5 of the EP&A Act.	No
Is the activity exempt from the NPW Act or NPW Regulation?	The proposal is not exempt under this Act or Regulation.	No
Do either or both apply: Is the activity in an Aboriginal place? Have previous investigations that meet the requirements of this Code identified Aboriginal objects?	The activity will not occur in an Aboriginal place. The study area has been subject to a preliminary Aboriginal heritage assessment by OzArk in 2021.	No
Is the activity a low impact one for which there is a defence in the NPW Regulation?	The proposal is not a low impact activity for which there is a defence in the NPW Regulation.	No
Is the activity occurring entirely within areas that are assessed as 'disturbed lands'?	The proposal is not entirely within areas of high modification.	No
Due I	Diligence Code of Practice assessment is required	

Table 2-1: Determination	of whether Due [	Diligence Code of	Practice applies.
	of which buc b	Singenee oode of	r ruotioc upplico.

## 2.3 APPLICATION OF THE DUE DILIGENCE CODE OF PRACTICE TO THE PROPOSAL

To follow the generic due diligence process, a series of steps in a question/answer flowchart format (DECCW 2010: 10) are applied to the proposed impacts and the study area, and the responses documented.

#### 2.3.1 Step 1

#### Will the activity disturb the ground surface or any culturally modified trees?

#### Yes, the proposal will impact the ground surface and may impact culturally modified trees.

The proponent is proposing to construct a freight hub which will allow for the storage and maintenance of rail materials and machinery. The construction of the proposal will therefore require preliminary earthworks which will impact the ground surface.

The corridors of Craige Lea Lane are densely vegetated, therefore the proposal may impact culturally modified trees if mature vegetation is present. One mature tree is present along the southern boundary of Lot 233 DP755131 however this tree was inspected as part of OzArk (2021) and did not contain cultural modification (**Figure 2-2**).

### 2.3.2 Step 2a

# Are there any relevant confirmed site records or other associated landscape feature information on AHIMS?

#### No, there are no previously recorded sites within the study area.

A search of the Aboriginal Heritage Information Management System (AHIMS) on 17 March 2023 was undertaken over a 5 x 5 km search area (GDA Zone 55 Eastings: 610694–620637, Northings 6420967–6430960). The search returned 24 previously recorded Aboriginal sites within the search area; however, none are within the study area (**Figure 2-2**).

Results from the AHIMS search suggest modified trees (carved or scarred) are the most likely site type to be recorded in the region (n=10, 42.5%), followed by isolated finds (n=5, 21.5%) (**Table 2-1**). Culturally modified trees have been previously recorded along creek or drainage lines or along road corridors where mature trees are more likely to be extant. The AHIMS search shows artefact sites have been predominately recorded on landforms with gilgai and/or along the Macquarie River. The remainder of sites returned within the AHIMS search consist of modified trees associated with burials, artefact scatters and artefact sites with an unspecified quantity (n=3, 12%).

Given the western portion of the study area contains gilgai, there is increased potential for artefact sites (isolated finds or low-density scatters) to be present. Scarred trees, if present, will only be recorded within the road corridors. Due to the previous disturbances across the study area (i.e. ploughing) any artefact sites would be in a secondary context.

A total of five isolated finds (AHIMS #35-3-0292, 35-3-0293, 35-3-0294, 35-3-0295 and 35-3-0296) as well as two artefact scatters (AHIMS #35-3-0297 and 35-3-0298) were recorded by Jacobs for the Narromine South Multi-Function Compound in 2021. OzArk was unable to gain access to information regarding these sites, however it is noted that all seven sites are located approximately 400-500 m south of the study area and will not be harmed by the proposal.

Site Type	Number	% Frequency
Modified tree (carved or scarred)	10	42.5
Isolated finds	5	21.5
Modified tree (carved or scarred) & burial	3	12.0
Artefact site (quantity unspecified)	3	12.0
Artefact scatter	3	12.0
Total	24	100

 Table 2-2: Site types and frequencies of AHIMS sites near the study area.



Figure 2-3: Previously recorded sites in relation to the study area.

#### 2.3.3 Step 2b

Are there any other sources of information of which a person is already aware?

No, there are no other sources of information that would indicate the presence of Aboriginal objects in the study area.

#### 2.3.3.1 Ethnohistoric context

The proposal is in the northern region of Wiradjuri land (Horton 1996). The Wiradjuri people were first encountered by colonial explorers such as Oxley and Cummingham in the early 1800s (Whitehead 2003). They found that Wiradjuri groups, such as the 'Bultje tribe' comprised of up to 120 individuals and hunted emus, kangaroo, and possum for food. Fishing was also utilised to sustain the population with both mussels and freshwater fish being caught by the women of the tribe who used moveable dams made of grass to direct fish, making them easier to catch (Kass 2003: 6).

#### 2.3.3.2 Regional archaeological context

The archaeological investigations summarised below provide baseline data for placing past Aboriginal sites within the regional landscape context.

#### Koettig 1985

Koettig focussed more heavily on Aboriginal occupation around the town of Dubbo, however the pattens and trends she recorded are still relevant to the Narromine area. She concluded that artefact scatters, culturally modified trees and grinding grooves were the most frequently recorded site type in the region. The location and size of a particular site was determined to be dependent on both social and environmental factors including proximity to water, availability of food and geological formations. Koettig's predictive model concluded that all site types were more likely to be recorded along waterways except scarred trees and 'small' campsites, which did not occur in a predictable manner.

#### OzArk 2006

An assessment of Aboriginal heritage resources within the then Dubbo LGA to assist Dubbo City Council with planning was undertaken by OzArk (2006). This study aimed to consolidate previous surveys and assessments of Aboriginal heritage; set a baseline for further study; and survey areas zoned for future expansion. Approximately 1,120 ha of land was surveyed within five study areas surrounding the city of Dubbo. During the survey, 26 new Aboriginal sites were recorded, and eight out of 12 previously recorded sites were relocated. A number of the newly recorded site types were similar to those found in previous studies.

Fewer scarred trees were found than expected, likely due to intensive agricultural practices and associated tree clearance around Dubbo city compared to the broader Dubbo LGA. No new grinding groove sites were found, which was probable, given that this site type comprised only 3.6% of previously located sites within the Dubbo LGA. Scarred tree distribution adhered to the predictive model, exclusively following waterways and fence-lines, although this probably reflected land clearing practices more than Aboriginal site patterning.

Isolated finds and open sites followed a similar pattern, largely limited to watercourse edges and elevated terraces within 500 m of the Macquarie River and other permanent to semi-permanent waterways. No significant patterning emerged in terms of site size or quality, perhaps because surface manifestations often do not adequately reflect site size or complexity.

#### OzArk 2014

The report is the result of the Dubbo LGA Aboriginal cultural heritage study which utilised GIS mapping, community consultation and archaeological resources to gain a more comprehensive understanding of the Aboriginal heritage of the Dubbo area. A total area of 207 square kilometres was surveyed as part of the project.

A total of 679 Aboriginal sites were recorded during the survey. Sites including artefact scatters, hearths, areas of potential archaeological deposit (PAD) and open camp sites, which comprised 57% of all sites located.

Culturally modified trees comprised 39% of recorded sites throughout the LGA. It was concluded that all sites were located within 500 m of waterways, however areas within 200 m are likely to contain more sites.

#### OzArk 2016

A 2016 study analysing site distribution across the central west region of NSW concluded that most Aboriginal site recordings are situated within Channel and Floodplain landscapes. Within these landscapes, modified trees are the most likely site type to be recorded. The report also found a strong correlation between site location and proximity to water. As the study area is situated within the Boggy Cowal Alluvial Plains landscape unit (Mitchell 2002), the results of OzArk 2016 suggest that there is a decreased likelihood for Aboriginal sites to be present within the study area.

#### 2.3.3.3 Assessments within or near the study area

#### Jacobs 2020

Jacobs (2020) completed an Aboriginal cultural heritage assessment for the N2N project. This assessment included an east-west corridor through the central portion of the study area. Across the entire assessment from Narromine to Narrabri, a total of 152 Aboriginal heritage sites and 13 areas of PADs were identified. All the identified sites were identified as having high social/cultural significance. None of the recorded sites are located within the study area.

#### <u>OzArk 2021</u>

In 2021, a preliminary assessment was conducted to assess the viability of Lot 16, 17, 232 and 233 DP755131 (encompassing the current study area) for future development. As part of the preliminary assessment an inspection was undertaken to assess the archaeological potential of

the landforms present and ground-truth levels of disturbance. Areas with remnant mature vegetation were targeted, as well as areas with gilgai, while most other landforms were assessed using vehicular reconnaissance. The pedestrian and vehicle tracks completed as part of this assessment in the study area is shown on **Figure 2-4**.

One previously unrecorded Aboriginal site was recorded during the inspection and is located approximately 2.7 km southwest of the current study area.



#### Figure 2-4: 2021 survey coverage within the current study area.

#### 2.3.4 Step 2c

Are there any landscape features that are likely to indicate presence of Aboriginal objects?

# No, there are no portions of the study area which contain landforms with identified archaeological sensitivity.

The Due Diligence Code of Practice (DECCW 2010) refers to several landscape features which have higher potential to contain Aboriginal objects. These include:

- Within 200 m of waters
- Located within a sand dune system
- Located on a ridge top, ridge line or headland

- Located within 200 m below or above a cliff face
- Within 20 m of or in a cave, rock shelter, or a cave mouth

on land that is not disturbed land.

The study area is situated on a flat plain landform within the Boggy Cowal Alluvial Plains landscape unit which is described as containing swamps and lagoons with river red gum, white cypress pine and grasses in areas of depression (Mitchell 2002: 50).

The study area does not contain any permanent water sources, and the closest named waterway, Backwater Cowal, is located approximately 2.8 km to the north. The western portion of the study area contains gilgai which would have provided resources during periods of high rainfall, however, the areas containing gilgai are on 'disturbed land'.

As such, no landforms with archaeological sensitivity identified in the Due Diligence Code of Practice are present within the study area.

A 'no' answer for Question 2 a-c, results in the following outcome (DECCW 2010: 10):

AHIP (Aboriginal Heritage Impact Permit) application not necessary. Proceed with caution. If any Aboriginal objects are found, stop work, and notify Heritage NSW (02) 9873 8500 (heritagemailbox@environment.nsw.gov.au). If human remains are found, stop work, secure the site, and notify NSW Police and Heritage NSW.

The proponent has however elected to apply the precautionary principle and complete a visual inspection of the trees within the corridor of Cragie Lea Lane in the north of the study area.

#### 2.3.5 Step 3

Can harm to Aboriginal objects or disturbance of archaeologically sensitive landscape features be avoided?

Yes. Landforms with identified archaeological sensitivity will not be impacted by the proposal, nor will any known Aboriginal objects.

As no identified archaeological sensitive landforms or known Aboriginal objects are present within the study area, they will not be harmed by the proposal.

#### 2.3.6 Step 4

Does a desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely?

No, there were no Aboriginal objects or sensitive landforms identified during the visual inspection.

The visual inspection of the northern boundary of the study area was undertaken by OzArk Archaeologist, Imogen Crome, on 26 April 2023.

The study area was confirmed as consisting of flat plains landform with remnant mature vegetation (**Plate 1** and **Plate 2**).

Species of grey and Bimble box remain within the road corridor at the northern end of the study area. Many of these trees have been scarred by naturally occurring processes, however no vegetation displayed comprehensive signs of cultural modification (**Plate 3**).

Ground cover consisted of long grasses and weeds which greatly reduced the level of ground surface exposure (GSE) within the study area to around (0-10%). Areas of exposure which had been trampled by wild animals allowed for marginally increased ground surface visibility (GSV) to approximately 10-15% (**Plate 4**).

The visual inspection did not record any Aboriginal sites or landforms with subsurface archaeological potential. The lack of archaeological potential is based on the undifferentiated nature of the landform and lack of resources (i.e. water) which would have attracted occupation by Aboriginal people.





# 2.4 CONCLUSION

The due diligence process has resulted in the outcome that an Aboriginal Heritage Impact Permit (AHIP) is not required. The reasoning behind this determination is set out in **Table 2-3**.

#### Table 2-3: Due Diligence Code of Practice application.

Step	Reasoning	Answer
Step 1 Will the activity disturb the ground surface or any culturally modified trees?	The proposed works will disturb the ground surface through earthworks associated with the construction of maintenance and storage facilities. The proposal may impact mature, native vegetation and therefore could harm culturally modified trees if present.	Yes
If the answer to Step 1 is 'yes', proceed	to Step 2	
Step 2a Are there any relevant records of Aboriginal heritage on AHIMS to indicate presence of Aboriginal objects?	AHIMS indicated that there are no Aboriginal sites within the study area.	No
Step 2b Are there other sources of information to indicate presence of Aboriginal objects?	There are no other sources of information to indicate that Aboriginal objects are likely in the study area.	No
Step 2c Will the activity impact landforms with archaeological sensitivity as defined by the Due Diligence Code?	Landforms with identified archaeological sensitivity are not present within the study area and will therefore not be harmed by the proposal, however the proponent has elected complete a visual inspection of the trees along the northern boundary of the study area to ensure culturally modified trees are not present.	No
If the answer to any stage of Step 2 is 'y	yes', proceed to Step 3	
Step 3 Can harm to Aboriginal objects listed on AHIMS or identified by other sources of information and/or can the carrying out of the activity at the relevant landscape features be avoided?	The proposal will not impact landforms with archaeological sensitivity or harm known Aboriginal objects. However, the proponent has elected to proceed to Step 4 to inspect vegetation in the northern boundary of the study area.	Yes
If the answer to Step 3 is 'no', a visual i	nspection is required. Proceed to Step 4.	
Step 4 Does the visual inspection confirm that there are Aboriginal objects or that they are likely?	The visual inspection recorded no Aboriginal objects, culturally modified trees, or areas of PAD within the study area. Landforms identified at a desk-top level were found during the inspection to have low archaeological potential.	No
Conclusion		
	AHIP not necessary. Proceed with caution.	

#### **3** MANAGEMENT RECOMMENDATIONS

The undertaking of the due diligence process resulted in the conclusion that the proposed works will have an impact on the ground surface, however, no Aboriginal objects or intact archaeological deposits will be harmed by the proposal. This moves the proposal to the following outcome:

Aboriginal Heritage Impact Permit application not necessary. Proceed with caution. If any Aboriginal objects are found, stop work, and notify Heritage NSW (02) 9873 8500 (heritagemailbox@environment.nsw.gov.au). If human remains are found, stop work, secure the site and notify NSW Police and Heritage NSW.

To ensure the greatest possible protection to the area's Aboriginal cultural heritage values, the following recommendations are made:

- 1) The proposed work may proceed at the study area without further archaeological investigation under the following conditions:
  - a) All land and ground disturbance activities must be confined to within the study area, as this will eliminate the risk of harm to Aboriginal objects in adjacent landforms. Should the parameters of the proposal extend beyond the assessed areas, then further archaeological assessment may be required.
  - b) All staff and contractors involved in the proposed work should be made aware of the legislative protection requirements for all Aboriginal sites and objects.
- 2) This assessment has concluded that there is a low likelihood that the proposed work will adversely harm Aboriginal cultural heritage items or sites. If during works, however, Aboriginal artefacts or skeletal material are noted, all work should cease and the procedures in the Unanticipated Finds Protocol (Appendix 2) should be followed.
- 3) Inductions for work crews should include a cultural heritage awareness procedure to ensure they recognise Aboriginal artefacts (Appendix 3) and are aware of the legislative protection of Aboriginal objects under the National Parks & Wildlife Act 1974 and the contents of the Unanticipated Finds Protocol.
- 4) The information presented here meets the requirements of the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales. It should be retained as shelf documentation for five years as it may be used to support a defence against prosecution in the event of unanticipated harm to Aboriginal objects.

## REFERENCES

Burra Charter 2013	International Council on Monuments and Sites 2013. <i>The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance</i> .
DECCW 2010	DECCW. 2010. <i>Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW</i> . Department of Environment, Climate Change and Water, Sydney.
Horton 1996	Horton, D. 1996. <i>The AIATIS Map of Indigenous Australia</i> . The Australian Institute for Aboriginal and Torres Strait Islander Studies, Canberra.
Jacobs 2020	Jacobs. 2020. Narromine to Narrabri Project. Aboriginal cultural heritage assessment report. Report to ARTC Inland Rail.
Kass 2003	Kass, T. 2003. <i>Parkes Shire Thematic History</i> . Report to Parkes Shire Council.
Koettig 1985	Koettig, M. 1985. Assessment of Aboriginal Sites in the Dubbo City Area. Report to: Dubbo City Council.
Mitchell 2002	Mitchell, Dr. Peter. 2002. <i>Description for NSW (Mitchell) Landscapes Version 2.</i> Department of Environment and Climate Change NSW.
OEH 2011	Office of Environment and Heritage. 2011. <i>Guide to Investigating,</i> Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales. Department of Environment, Climate Change and Water, Sydney.
OzArk 2006	OzArk 2006 OzArk Environmental & Heritage Management, 2006. <i>Aboriginal Heritage Study: Dubbo Local Government Area.</i> Report to Dubbo City Council.
OzArk 2014	OzArk Environment and Heritage. 2014. <i>Aboriginal Heritage Management: GIS layers as planning tools.</i> Report to: Dubbo City Council.
OzArk 2016	OzArk Environment and Heritage. 2016. <i>Central West Local Land Services Travelling Stock Reserves Study</i> . Report to: Central West Local Land Services.
OzArk 2021	OzArk Environment and Heritage. 2021. <i>Aboriginal and Historic Heritage</i> <i>Opportunities and Constraints Analysis.</i> Report to: Australian Rail Track Corporation.
Whitehead 2003	Whitehead, J. 2003, <i>Tracking and Mapping The Explorers Volume 1 The Lachlan River Oxley, Evans, and Cunningham</i> , Southern Cross University Printery: Lismore.

# PLATES



# APPENDIX 1: AHIMS SEARCH RESULTS

SiteID	SiteName GDM 1	Datum GDA	Zone	Easting 614373		Context	Site Status **	SiteFeatures Artefact : 1	SiteTypes	Reports
35-3-0206					6429946	Open site	Valid	Permits		
35-3-0183	Contact TNWP-ST27	Recorders AGD		617840	e Connections F 6424831	ty Ltd, Mr.Benjar Open site	Valid	Modified Tree		
5-5-0105	1447-5127	AUD	35	01/040	0424031	open site	Valid	(Carved or Scarred) : 1		
	Contact	Recorders	Doc	tor.Jodie Ber				Permits		
\$5-3-0182	TNWP-ST26	AGD	55	618563	6424489	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact	Recorders		tor.]odie Be				Permits		
5-3-0296	Narromine South IF5	GDA	55	614735	6425373	Open site	Valid	Artefact : -		
	Contact	Recorders	Jaco	bs Group (A	ustralia) Pty Lto	d - Newcastle,Ms.		Permits		
35-3-0207	GDM 2	GDA		614370	6430118	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact	Recorders				'ty Ltd,Mr.Benjar		Permits		
15-3-0013	Wallaby Ranges;	AGD		616084	6422257	Open site	Valid	Modified Tree (Carved or Scarred) : -, Burial : -	Burial/s,Carved Tree	65
	Contact	Recorders		id Bell				Permits		
\$5-3-0299	MDC AS01	GDA		613198	6426474	Open site	Valid	Artefact : -		
	Contact	Recorders					ont,Mr.Michael Lever	Permits		
5-3-0208	GDM 3	GDA		614423	6430236	Open site	Valid	Artefact : 1		
	Contact	Recorders				tage Connection		Permits		
5-3-0291	Craigie Lea OS-1	GDA	55	612824	6424674	Open site	Valid	Artefact : •		
	Contact	Recorders						(austral arch Permits		
5-3-0294	Narromine South IF1	GDA	55	614230	6425544	Open site	Valid	Artefact : -		
	Contact	Recorders				d - Newcastle,Ms.		Permits		
5-3-0298	Narromine South AS7	GDA	55	615441	6425184	Open site	Valid	Artefact : -		
	Contact	Recorders	Jaco	bs Group (A	ustralia) Pty Lte	d - Newcastle,Ms.	Alison Lamond	Permits		
85-3-0185	TNWP-ST29	AGD	55	616091	6422297	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact	Recorders		tor.Jodie Ber				Permits		
\$5-3-0186	TNWP-ST30	AGD	55	616357	6424080	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact	Recorders	Doct	tor.Jodie Bei	nton			Permits		

teName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
arromine	AGD	55	616948	6427656	Open site	Valid	Modified Tree (Carved or Scarred) : -, Burial : -	Burial/s,Carved Tree	65
iontact	Recorders	David	Bell,R Ethe	ridge,T Elliot,E	Milne,Euromedha	Dick	Permits		
NWP-ST25	AGD	55	619386	6424375	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
Contact	Recorders						Permits		
arromine South AS6	GDA	55	615449	6425224	Open site	Valid	Artefact : -		
ontact	Recorders	Jacob	s Group (Au	stralia) Pty Lto	d - Newcastle,Ms.Al	lison Lamond	Permits		
arromine South IF4	GDA	55	614614	6425327	Open site	Valid	Artefact : -		
Contact	Recorders	Jacob	s Group (Au	stralia) Pty Lte	i - Newcastle,Ms.Al	lison Lamond	Permits		
arromine South IF2	GDA	55	614394	6425347	Open site	Valid	Artefact : -		
ontact	Recorders	lacob	s Group (A)	stralia) Ptv Ltr	I - Newcastle Ms Al	lison Lamond	Permits		
arromine South IF3	GDA					Valid	Artefact : -		
ontact	Pacardare					licen Lemend	Parmite		
-ST-1	AGD			6430650	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	4340
ontact	Recorders	Centr	al West Are	haeological an	d Haritzaa Sarvices	Ptultd	- Permits		
WWP-ST28	AGD			6424944	Open site	Valid	Modified Tree (Carved or Scarred) :		
ontact	Recorders	Docto	vr ladie Ren	ion					
D36	AGD			6430530	Open site	Valid	Modified Tree (Carved or Scarred) :		
Contact	Recorders	Navin	Officer He	itage Consulta	nts Pty Ltd		Permits		
allaby Creek	AGD	55	618826	6422191	Open site	Valid	Modified Tree (Carved or Scarred) : -, Burial : -	Burial/s,Carved Tree	65
ontact	Recorders	David	Bell,R Ethe	ridge			Permits		
NWP-ST24	AGD	55	619467	6424356	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
ontact	Recorders	Docto	or.lodie Ben	ton			Permits		
	WP-ST25 antact arromine South IF4 antact arromine South IF4 antact antac	WWP-ST25     AGD       antact     Recorders       urromine South IF4     GDA       ontact     Recorders       urromine South IF4     GDA       ontact     Recorders       urromine South IF2     GDA       ontact     Recorders       urromine South IF3     GDA       ontact     Recorders       ontact     AGD       ontact     Recorders       ontact     Recorders	WWP-ST25     ACD     55       antact     Recorders     Doct       urromine South IF4     CDA     55       ontact     Recorders     Jacob       urromine South IF4     CDA     55       ontact     Recorders     Jacob       urromine South IF2     CDA     55       ontact     Recorders     Jacob       urromine South IF3     CDA     55       ontact     Recorders     Jacob       ST-1     ACD     55       ontact     Recorders     Jacob       opticat     ACD     55       ontact     Recorders     Jacob       opticat     ACD     55       ontact     Recorders     Jacob       opticat     ACD     55       ontact     Recorders     ACD       opticat     ACD     55       ontact     Recorders     ACD       opticat     ACD     55       ontact     Recorders     ACD       opticat     ACD     55       opticat     ACD     55       opticat     ACD     55       opticat     Recorders     ACD       opticat     Recorders     ACD       opticat     Recorder	www.str25     AGD     55     61938       antact     Recorders     Doctor-Jodie Bent Jacobs Group (Au stromine South JK3     Jacobs Group (Au strome South IF4       antact     Recorders     Jacobs Group (Au strome South IF4     Jacobs Group (Au strome South IF2       antact     Recorders     Jacobs Group (Au strome South IF3     Jacobs Group (Au strome South IF3       antact     Recorders     Jacobs Group (Au strome South IF3     Jacobs Group (Au strome South IF3       antact     Recorders     Jacobs Group (Au ST-1     AGD     S5       antact     Recorders     Jacobs Group (Au ST-1     Strome (Au ST-1     S5       antact     Recorders     Jacobs Group (Au ST-1     S5       antact     Recorders     AGD     S5       antact     Recorders     Jacobs Group (Au ST-1       antact     Recorders     AGD     S5       antact     Recorders     Jacobs Group (Au ST-1       antact     Recorders     AGD     S5       antact     Recorders	WWP-ST2S         AGD         S5         61938/6         6424375           antact         Recorders         Doctor.Jodie Benton             urromine South AS6         GDA         55         61554/9         6432524           antact         Recorders         Jacobs Group (Australia) Py Lte            urromine South IF4         GDA         55         614614         6425327           antact         Recorders         Jacobs Group (Australia) Py Lte         Stata         642347           urromine South IF2         GDA         55         614394         6423347           antact         Recorders         Jacobs Group (Australia) Py Lte         Stata           antact         Recorders         Jacobs Group (Australia) Py Lte         Stata           antact         Recorders         Jacobs Group (Australia) Py Lte         Stata           antact         Recorders         Jacobs Group (Australia) Py Lte         Stata         6430650           antact         Recorders         Jacobs Group (Australia) Py Lte         Stata         6430650           antact         Recorders         Jacobs Group (Australia) Py Lte         Stata         6430530           antact         AGD         S5         618870	WWP-ST25     AGD     S5     619386     6424375     Open site       antact     Becorders     Doctor.Jodie Benton     -       urromine South AS6     GDA     S5     615449     6425224     Open site       antact     Becorders     Jacobs Group (Australia) Pty Ltd - Newcastle,Ms.A       arromine South IF4     GDA     S5     61434     6425372     Open site       antact     Recorders     Jacobs Group (Australia) Pty Ltd - Newcastle,Ms.A       arromine South IF2     GDA     S5     614394     6425347     Open site       antact     Recorders     Jacobs Group (Australia) Pty Ltd - Newcastle,Ms.A       antact     Recorders     Jacobs Group (Australia) Pty Ltd - Newcastle,Ms.A       antact     Recorders     Jacobs Group (Australia) Pty Ltd - Newcastle,Ms.A       antact     Recorders     Jacobs Group (Australia) Pty Ltd - Newcastle,Ms.A       antact     Recorders     Jacobs Group (Australia) Pty Ltd - Newcastle,Ms.A       antact     Recorders     Jacobs Group (Australia) Pty Ltd - Newcastle,Ms.A       antact     Recorders     Jacobs Group (Australia) Pty Ltd - Newcastle,Ms.A       antact     Recorders     Jacobs Group (Australia) Pty Ltd - Newcastle,Ms.A       antact     Recorders     Jacobs Group (Australia) Pty Ltd - Newcastle,Ms.A       antact     Recorde	WWP-ST25     AGD     S5     619386     6424375     Open site     Valid       antact     Recorders     Doctor/odie Benton     -     Valid       antact     Recorders     Jacobs Group (Australis) Pty Lid - Newcastle,Ms.Alison Lamond       antact     Recorders     Jacobs Group (Australis) Pty Lid - Newcastle,Ms.Alison Lamond       antact     Recorders     Jacobs Group (Australis) Pty Lid - Newcastle,Ms.Alison Lamond       antact     Recorders     Jacobs Group (Australis) Pty Lid - Newcastle,Ms.Alison Lamond       antact     Recorders     Jacobs Group (Australis) Pty Lid - Newcastle,Ms.Alison Lamond       antact     Recorders     Jacobs Group (Australis) Pty Lid - Newcastle,Ms.Alison Lamond       antact     Recorders     Jacobs Group (Australis) Pty Lid - Newcastle,Ms.Alison Lamond       antact     Recorders     Jacobs Group (Australis) Pty Lid - Newcastle,Ms.Alison Lamond       antact     Recorders     Jacobs Group (Australis) Pty Lid - Newcastle,Ms.Alison Lamond       antact     Recorders     Jacobs Group (Australis) Pty Lid - Newcastle,Ms.Alison Lamond       antact     Recorders     Jacobs Group (Australis) Pty Lid - Newcastle,Ms.Alison Lamond       antact     Recorders     Jacobs Group (Australis) Pty Lid - Newcastle,Ms.Alison Lamond       antact     Recorders     Jacobs Group (Australis) Pty Lid     Open site     Valid       antact <td>Recorders       David Bell, R Ehersige: T Elliot, E Milee, Eurometha Dick       Paralls:         WP-STZS       AGD       S5       619386       6424375       Open site       Valid       Modified Tree (Carved or Scarved) : a latation of the seconders         ontlact       Recorders       Dotter/Jolie Benton        Recorders       Noter/Jolie Benton        Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       &lt;</td> <td>Barial:       Barial:       Baria:       Barial:       Barial:</td>	Recorders       David Bell, R Ehersige: T Elliot, E Milee, Eurometha Dick       Paralls:         WP-STZS       AGD       S5       619386       6424375       Open site       Valid       Modified Tree (Carved or Scarved) : a latation of the seconders         ontlact       Recorders       Dotter/Jolie Benton        Recorders       Noter/Jolie Benton        Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       Recorders         ontlact       Recorders       Jacobs Group (Australia) Pby Ltd - Newcastle,MS.Alison Lamond       <	Barial:       Baria:       Barial:       Barial:

Г

NSV	v.	AHIMS Web Ser Extensive search - Si		I							f/PO Number : 37 ervice ID : 7648
<u>elD</u>	SiteName		Datum	Zone	Kasting	Northing	Context	Site Status **	SiteFeatures Site	ypes	Reports
estroyed artially D	sita has been recorded s The site has been comp estroyed - The site has b	and accepted onto the system as valid ordely impacted or harmed usually as conseque een only partially impacted or harmed usually as ally entired and accepted onto A IIIMS as a vali	s consequence of permit activ	ity but sam	ietimes also afte	er netural events	. There might be pa	rts or sactions of the origin	al site still present on the ground	nolified	
						aborga					
		Web Service on 17/03/2023 for Jurda				GDA, Zone :	55, Eastings : 61	10694.0 - 620637.0, 1	lorthings : 6420967.0 -		
		meters Number of Aboriginal sites a to be free from error ontission. Heritage NSP				or omission m	ule on the informat	ion and curseous nets of	such acts or amission		Page

## **APPENDIX 2: ABORIGINAL HERITAGE: UNANTICIPATED FINDS PROTOCOL**

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 onsite.

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 to avoid further harm to the Aboriginal object
  - d. Notify Heritage NSW as soon as practical on (02) 9873 8500 (heritagemailbox@environment.nsw.gov.au), providing any details of the Aboriginal object and its location; and
  - e. Not recommence any work at the particular location unless authorised in writing by Heritage NSW.
- 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 (normally an Aboriginal Heritage Impact Permit).

# 1000 A retouched silcrete flake A quartz flake Microliths (scale = 1 cm) Volcanic flakes platform: proximal end cortex negative flake dorsal scars surface ventral flake scar surface ridges (under) distal end Flake characteristics (scale = 1 cm) A mudstone/tuff core from which flakes have been removed

# **APPENDIX 3: ABORIGINAL HERITAGE: ARTEFACT IDENTIFICATION**