Appendix F

Aboriginal Cultural Heritage Assessment

REGIS RESOURCES LTD

View west showing the undulating landscape of the Addendum 2 study area.

ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT ADDENDUM 2

MCPHILLAMYS GOLD PROJECT WATER SUPPLY PIPELINE

BATHURST LGA, NSW

MAY 2022

Report prepared by

OzArk Environment & Heritage

for LFB Resources NL (Regis)

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Heritage NSW

ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT COVER SHEET

Report Title	Aboriginal Cultural Heritage Assessment Report Addendum 2: McPhillamys Gold Project Water Supply Pipeline
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Report prepared for	Company Name: Regis Resources Contact Person: Danielle Wallace Address: 57 Adelaide Street, Blayney, NSW 2799 Email: dwallace@regisresources.com Phone: 02 6368 4100
Date of Report	25 May 2022
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Harrison Rochford, OzArk Environment & Heritage Archaeologist

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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.

ABBREVIATIONS AND GLOSSARY

ACHAR	Aboriginal Cultural Heritage Assessment Report. As set out in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*, all developments where harm to Aboriginal objects is likely must be assessed in an ACHAR.
ACHCRs	*Aboriginal Cultural Heritage Consultation Requirements for Proponents.* Guidelines for conducting Aboriginal community consultation for developments where harm to Aboriginal objects is likely.
ACHMP	Aboriginal Cultural Heritage Management Plan.
AHIMS	Aboriginal Heritage Information Management System. Administered by Department of Premier and Cabinet, AHIMS is the central register of all Aboriginal sites within NSW.
AHIP	Aboriginal Heritage Impact Permit. Issued by Heritage NSW to allow harm to Aboriginal objects.
Assemblage:	All artefacts recorded at a location. In this report, assemblage refers to stone artefacts as this was the only artefact class recorded.
BP	Years before present.
Code of Practice	*Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* under Part 6 of the NPW Act. Issued by DECCW in 2010, the Code of Practice is a set of guidelines that allows limited test excavation without the need to apply for an AHIP.
DPE	NSW Department of Planning 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. A measure of factors that may reveal surface artefacts such as erosion scalds.
GSV	Ground surface visibility. A measure of factors that may obscure the detection of surface artefacts such as leaf litter.
Heritage NSW	Government department tasked with ensuring compliance with the NPW Act. Heritage NSW is advised by the Aboriginal Cultural Heritage Advisory Committee (ACHAC).

NPW Act	*National Parks and Wildlife Act 1974*. 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 DPE.
SSD	State Significant Development.

EXECUTIVE SUMMARY

The McPhillamys Gold Project (the Project) is located 8 kilometres (km) north-east of Blayney in Central West of New South Wales (NSW). The Project would include the development and operation of an open cut gold mine and supporting infrastructure over a 15-year project life.

LFB Resources NL (the proponent) (ABN 90 073 478 574), a 100% owned subsidiary of Regis Resources Limited (Regis) is the applicant for the Project.

Regis is seeking a state significant development (SSD) consent under Division 4.7 of Part 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) to develop and operate a greenfield open cut gold mine, associated mine infrastructure and a water supply pipeline in Central West NSW.

Regis submitted the *McPhillamys Gold Project Environmental Impact Statement* (Regis, 2019) (the EIS) for assessment under the EP&A Act in 2019. In 2020, Regis submitted the *McPhillamys Gold Project Submissions Report* (Regis, 2020a) (the Submissions Report) to the Department of Planning and Environment (DPE) in response to the submissions received on the EIS. The *McPhillamys Gold Project Amendment Report* (Regis, 2020b) (the 2020 Amendment Report) was also submitted with the Submissions Report to incorporate project changes proposed in response to the submissions received on the EIS.

Since lodgement of the 2020 Amendment Report, Regis has refined the Project design to respond to comments raised by the Department of Planning, Industry and Environment – Water regarding the mine site water management system and the outcomes of ongoing consultation with landholders along the water supply pipeline. Regis is therefore preparing a second Amendment Report (the 2022 Amendment Report) to incorporate these changes into the Project.

OzArk Environment & Heritage (OzArk) has been engaged by LFB Resources NL to complete an Aboriginal Cultural Heritage Assessment Report (ACHAR) Addendum 2 to support the 2022 Amendment Report. This ACHAR Addendum 2 focuses on the approximate 1.6 kilometre (km) long section of the realigned water supply pipeline. This addendum ACHAR (termed the Addendum 2 ACHAR) is supported by two previous assessments for the Project water supply pipeline:

- an ACHAR for the initial assessment (OzArk 2019) for the EIS; and
- an addendum ACHAR for a new pipeline route (OzArk 2020) for the 2020 Amendment Report.

The OzArk investigations have focused on the pipeline route, while the mine site is assessed in Landskape (2019). The Addendum 2 ACHAR should be read in conjunction with these previous reports. This ACHAR supports the Amendment Report which focuses on the current study area that comprises of approximately 1.6 km long section of amended pipeline that is located approximately 10 km southwest to Bathurst, NSW (hereafter termed the study area).

The survey component of the assessment was completed on 3 March 2022 by Harrison Rochford (OzArk archaeologist) and Tina Scott (Bathurst Local Aboriginal Land Council field officer). There was one location with Aboriginal artefacts recorded during the survey. The location is most likely part of the previously recorded site Swan Ponds Quarry 1 (AHIMS #44-2-0296).

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

- Legal requirements under the terms of the *National Parks & Wildlife Act 1974* (NPW Act) whereby it is illegal to damage, deface or destroy an Aboriginal place or object without an approved Aboriginal Cultural Heritage Management Plan (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. This report should be read in conjunction with Landskape (2019), OzArk (2019) and OzArk (2020) as their recommendations, management and mitigation measures are relevant to the study area.
2. If the amended Project is approved, archaeological management strategies to avoid impact of Swan Ponds Quarry 1 (AHIMS #44-2-0296) should be implemented.
3. All land-disturbing activities must be confined to within the assessed study area. Should the parameters of the proposed work extend beyond this, then further archaeological assessment may be required.

4. If the amended Project is approved and development consent is issued under Part 4 of the EP&A Act, an Aboriginal Heritage Impact Permit (AHIP) would not be required, as AHIPs are not required for SSD pursuant of section 4.41 of the EP&A Act. Management of Aboriginal cultural heritage would be managed through an ACHMP which is to be agreed to by the proponent, Registered Aboriginal Parties (RAPs) and the DPE. The archaeological management recommendations within this report would normally be incorporated into the ACHMP that is usually formulated following development consent. The ACHMP will also include an unanticipated finds protocol, unanticipated skeletal remains protocol, and long-term management of any salvaged artefacts. The ACHMP should also include a protocol should tangible evidence associated with the Bathurst Wars be noted during construction to ensure that any such evidence is appropriately managed.

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FIGURES

TABLES

1 INTRODUCTION

1.1 DESCRIPTION OF THE PROJECT

The McPhillamys Gold Project (the Project) is located 8 kilometres (km) north-east of Blayney in Central West of New South Wales (NSW). The Project includes the development and operation of an open cut gold mine and supporting infrastructure over a 15-year project life.

LFB Resources NL (ABN 90 073 478 574), a 100% owned subsidiary of Regis Resources Limited (Regis) is the applicant for the Project.

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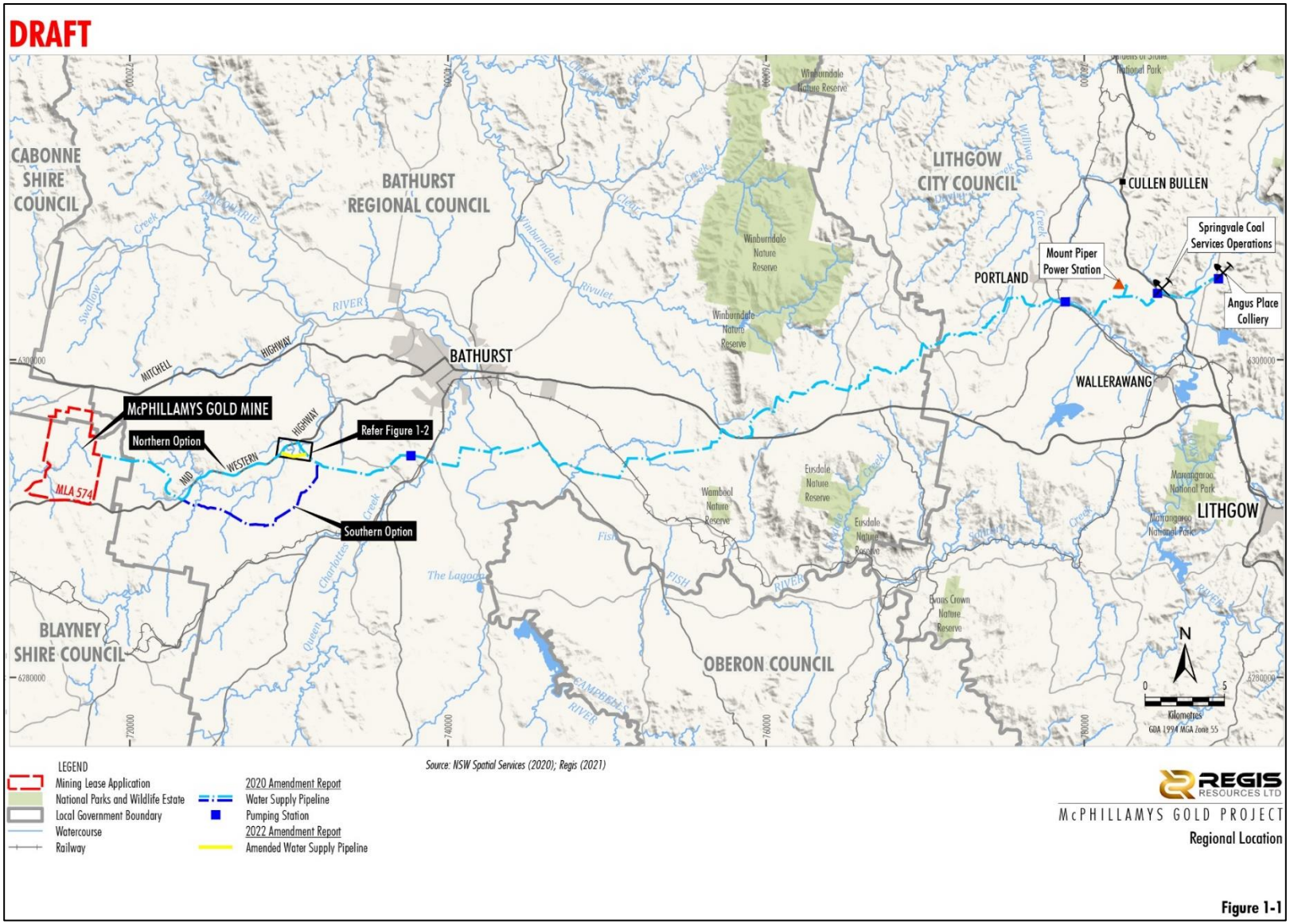
OzArk Environment & Heritage (OzArk) has been engaged by the proponent to complete an Aboriginal Cultural Heritage Assessment Report (ACHAR) to support the 2022 Amendment Report. This ACHAR Addendum 2 focuses on the approximate 1.6 kilometre (km) long section of realigned water supply pipeline. The proposal is located in the Bathurst Local Government Area (LGA) (**Figure 1-1**).

Figure 1-1: Map showing the location of the Project.



1.2 BACKGROUND

As shown on **Figure 1-1**, the Project is comprised of two key components; the mine site where the ore will be extracted and processed with the resultant gold produced for distribution to the market (the mine development), and an associated water pipeline which will enable the supply of water from approximately 90 km away near Lithgow to the mine site (the water supply pipeline development). The mine development is around 8 km northeast of Blayney, within the Blayney and Cabonne Local Government Areas (LGAs), and the pipeline development is within the Blayney, Bathurst, and Lithgow LGAs.

In 2018, OzArk was engaged by Blakely's Environmental, on behalf of Regis to complete an ACHAR and Historic Heritage Assessment (HHA) for the water supply pipeline development to support the EIS. The assessment was undertaken by OzArk archaeologist Dr Alyce Cameron during a series of pedestrian surveys between August 2018 and March 2019. During the pedestrian survey, seven Aboriginal sites (AHIMS #44-3-0221, #44-3-0222, #44-3-0223, #44-3-0224, #44-3-0225, #44-3-0229 and #44-3-0228) were recorded. No historic sites were recorded during the survey (OzArk 2019).

In addition, OzArk undertook an addendum ACHAR and HHA for the 2020 Amendment Report. The assessment was undertaken by OzArk archaeologist Dr Alyce Cameron on Tuesday 23 June to Thursday 25 June 2020. During the pedestrian survey, one Aboriginal site (AHIMS #44-5-0175) and two historic sites (HS-01 and HS-02) were recorded.

1.3 PROPOSED WORK

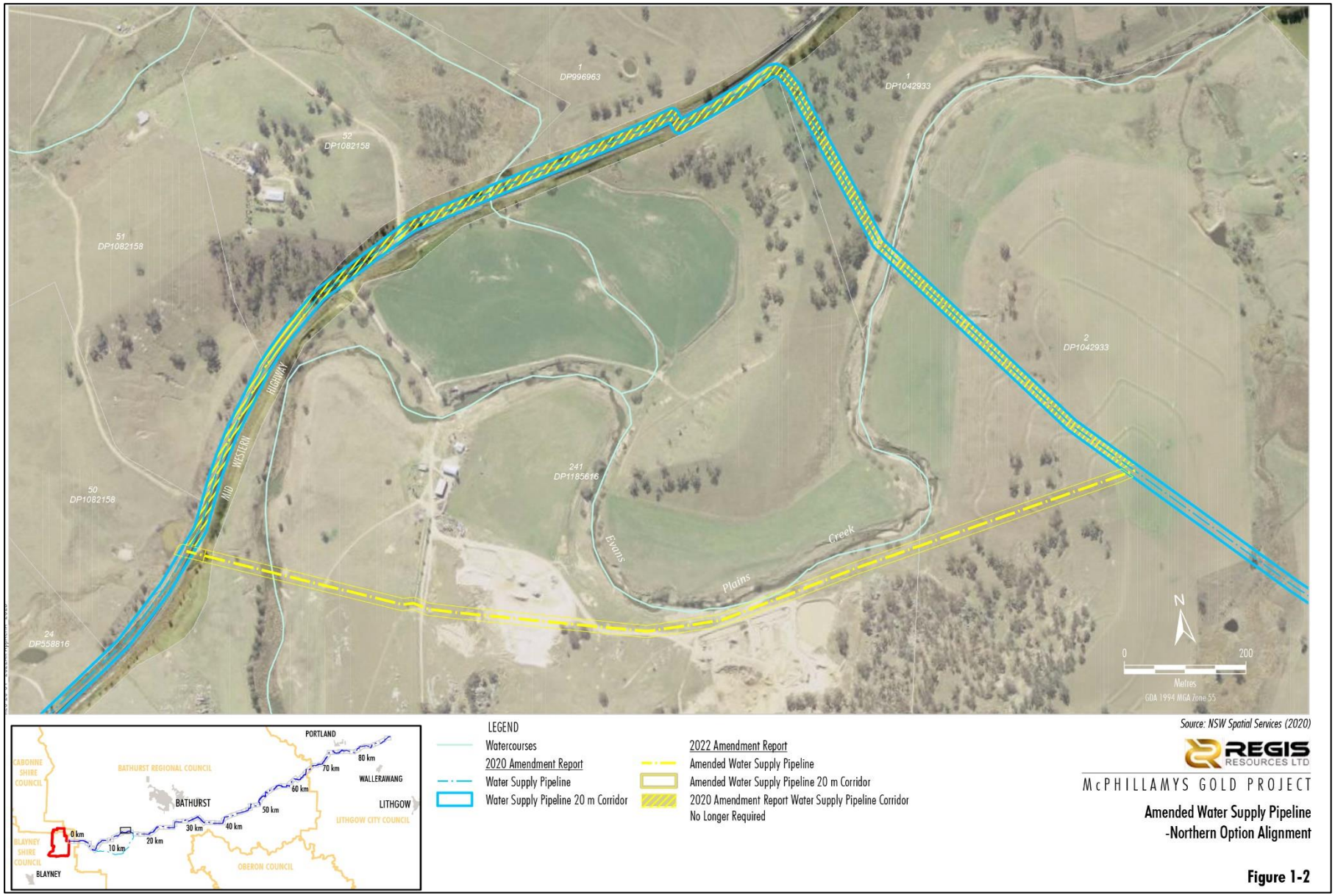
Since the preparation of the 2020 Amendment Report, the requirement for the following changes to the water supply pipeline have been identified based on the outcomes of ongoing landholder consultation:

- revised alignment of the northern option of the water supply pipeline; and
- revised location of Mount Piper Power Station water supply pipeline connection point removing the requirement for the proposed Mount Piper Power Station connection water pipeline (no additional surface development area required).

The 2020 Amendment Report included two water supply pipeline alignment options, the northern and southern options (**Figure 1-1**).

A section of the northern option of the water supply pipeline is proposed to be realigned based on the outcomes of landholder consultation. The realigned section of the water supply pipeline would be approximately 1.6 km in length, which is approximately 0.6 km shorter than the section of the 2020 Amendment Report water supply pipeline that it would replace (**Figure 1-2**).

Figure 1-2: Amended Water Supply Pipeline – Northern Option Alignment.



The realigned section of the water supply pipeline would predominantly be located on agricultural land (cropping and pasture) and disturbed areas (quarry) to minimise native vegetation clearance. The surface development widths along the realigned water supply alignment would be consistent with the 2020 Amendment Report water supply alignment:

- White Box Yellow Box Blakely's Red Gum Woodland and Derived Native Grassland listed as a Critically Endangered Ecological Community under the EPBC Act (the CEEC Communities) – 6 metres (m) surface development width;
- Other Native Vegetation and State Forests – 8 m surface development width; and
- Non-native Vegetation and Disturbed Areas – 20 m surface development width.

The water supply pipeline was proposed to cross Evans Plains Creek using open trenching techniques. The realigned water supply pipeline would cross Evans Plains Creek approximately 2.3 km upstream of the original crossing point. The crossing would be undertaken using open trenching techniques consistent with the 2020 Amendment Report. The realigned water supply pipeline would avoid crossing one unnamed watercourse.

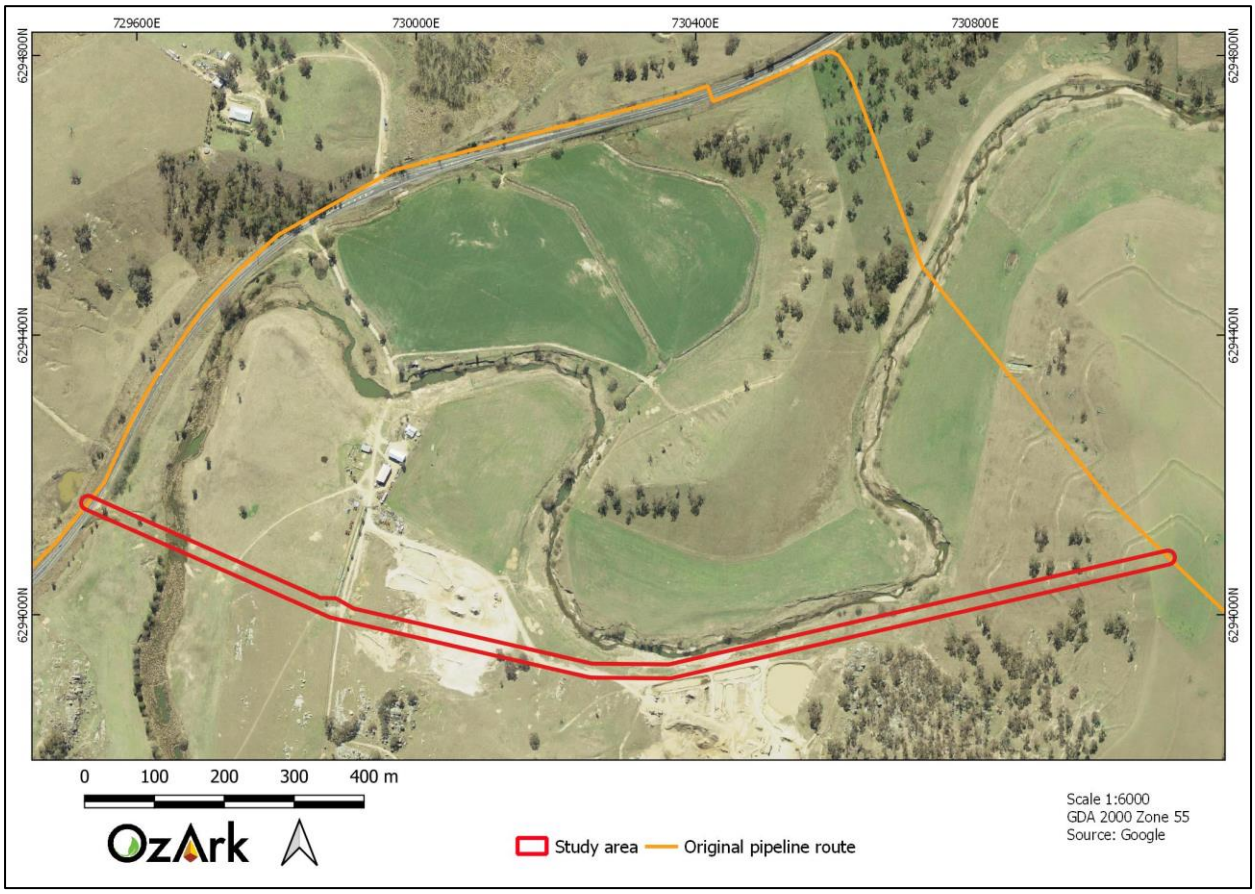
In addition, the surface development area associated with the replaced section of the 2020 Amendment Report water supply pipeline would no longer be required (**Figure 1-2**).

The revised location of Mount Piper Power Station water supply pipeline connection point is not considered further in the report as no additional surface development area is required.

1.4 ADDENDUM 2 STUDY AREA

The Addendum 2 study area (hereafter referred to as the study area) comprises of approximately 1.6 km section of water supply pipeline located approximately 10 km southwest to Bathurst, NSW (**Figure 1-1**). The study area includes a portion of land already disturbed by a small quarry (**Figure 1-3**).

Figure 1-3: Aerial showing the study area.



1.5 HISTORIC HERITAGE ASSESSMENT

Landskape (2019: 26–32) and OzArk (2019: 90–94) provide the historical background of the study area and the Project more broadly.

The assessment methodology of Ozark (2019) was applied to the study area during the field assessment and no items with potential heritage significance were identified. The closest item with historic heritage significance, the Binalong Homestead (I129 on the Bathurst Local Environmental Plan heritage schedule of 2014), would be 800 m further north of the revised alignment of the water supply pipeline compared to the water supply pipeline alignment assessed by OzArk (2019).

Given the limited change in the scope of works presented by the study area and the results of the field assessment, no additional historic heritage impacts are expected as a result of the amended water supply pipeline alignment. Given the above, there is nothing further to add to the existing heritage assessments for the Project and historic heritage will not be discussed further in this document.

2 ABORIGINAL CULTURAL HERITAGE ASSESSMENT OVERVIEW

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 *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance* (the *Burra Charter*) (Australia International Council of Monuments and Sites [Australia ICOMOS] 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 provide for the protection of heritage at various levels of government.

2.1.1 Commonwealth legislation

2.1.1.1 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 EPBC Act. Ministerial approval is required under the EPBC Act for proposals involving significant impacts to national or commonwealth heritage places.

2.1.1.2 Aboriginal and Torres Strait Islander Heritage Protection Act 1984

The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* is aimed at the protection from injury and desecration of areas and objects that are of significance to Aboriginal Australians. This legislation has usually been invoked in emergency and conflicted situations.

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

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

The EP&A Act established requirements relating to land use and planning. The main parts of the EP&A Act that relate to development assessment and approval are Part 4 (development assessment) and Part 5 (environmental assessment). The Minister responsible for the EP&A Act is the Minister for Planning and Public Spaces.

The EP&A Act currently provides the primary legislative basis for planning and environmental assessment in NSW. The objects of the EP&A Act include encouragement of:

- The proper management, development, and conservation of natural resources.
- The provision and coordination of the orderly and economic use and development of land.
- Protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats.
- Ecologically sustainable development.

The objects also provide for increased opportunity for public involvement and participation in environmental planning and assessment.

The EP&A Act includes provisions to ensure that the potential environmental impacts of a development or activity are rigorously assessed and considered in the decision-making process.

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.

2.1.2.2 Heritage Act 1977 (Heritage Act)

The Heritage Act 1977 (Heritage Act) is applicable to the current assessment. The Heritage Act is administered by the Heritage Council of NSW. The Heritage Council's role is to advise the government on the protection of heritage assets, make listing recommendations to the Minister in relation to the State Heritage Register (SHR), and assess/approve/decline proposals involving modification to heritage items or places listed on the SHR.

Automatic protection is afforded to 'relics', defined as 'any deposit or material evidence relating to the settlement of the area that comprised NSW, not being Aboriginal settlement, and which holds state or local significance' (note: formerly the Heritage Act protected any 'relic' that was more than 50 years old. Now the age determination has been dropped from the Heritage Act and relics are protected according to their heritage significance assessment rather than purely on their age). Excavation of land on which it is known or where there is reasonable cause to suspect that 'relics' will be exposed, moved, destroyed, discovered or damaged is prohibited unless ordered under an excavation permit.

Applicability to the Project

The amended Project will be assessed under Part 4 of the EP&A Act. As the amended Project is a SSD, if approved, section 4.41 of the EP&A Act would apply and therefore an approval under Part 4, or an excavation permit under section 139, of the Heritage Act.

Any items of local or state historical heritage significance within the study area are afforded legislative protection under the Heritage Act.

2.1.2.3 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 Part 6 of the NPW Act, 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 NPW 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 NPW 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 AHIP under section 90 of the NPW 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 NPW Act, it is a requirement to notify the Secretary of the DPE 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.

Under clause 60 of the *National Parks and Wildlife Regulation 2019* (NPW Regulation), proponents have a general obligation to consult with Aboriginal people about the Aboriginal cultural heritage values (cultural significance) of Aboriginal objects and/or places within the proposed project area. This consultation should follow the *Aboriginal cultural heritage consultation requirements for proponents* (ACHCRs) (DECCW 2010b).

Applicability to the Project

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

The amended Project will be assessed under Part 4 of the EP&A Act. As the Project is a SSD, if approved, section 4.41 of the EP&A Act would apply and therefore an Aboriginal Heritage Impact Permit (AHIP) under section 90 of the NPW Act to harm Aboriginal objects would not be required. Instead, all management related to Aboriginal cultural heritage within the study area would be governed by an *Aboriginal Cultural Heritage Management Plan* (ACHMP).

2.2 SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

Secretary's Environmental Assessment Requirements (SEARs) were issued by the Department of Planning, Industry and Environment (now DPE) on 24 July 2018 and revised on 19 December 2018. In relation to Aboriginal cultural heritage, the SEARs state:

- *The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the McPhillamys Gold Project and document these in the EIS. This may include the need for surface survey and test excavation. The identification of cultural heritage values should be guided by the* Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW *(DECCW, 2011) and consultation with OEH regional officers.*
- *Where Aboriginal cultural heritage values are identified, consultation with Aboriginal people must be undertaken and documented in accordance with the* Aboriginal cultural heritage consultation requirements for proponents 2010 *(DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the EIS.*

- *Impacts on Aboriginal cultural heritage values are to be assessed and documented in the EIS. The EIS must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH* (now Heritage NSW).

The SEARs are addressed in the existing ACHAR and ACHAR Addendum, and this ACHAR Addendum 2.

2.3 ASSESSMENT APPROACH

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

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 ACHCRs (DECCW 2010b).

2.4 PURPOSE AND OBJECTIVES

The purpose of this ACHAR Addendum 2 is to identify and assess heritage constraints relevant to the proposed works.

The ACHAR Addendum 2 has applied 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.

2.5 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 2-1** tabulates the compliance of this report with the requirements established by the Code of Practice.

Table 2-1: Report compliance with the Code of Practice.

Code of Practice Requirement	Context of the Requirement	Concordance in this report
Requirement 1a	Review previous archaeological work	**Section 5**
Requirement 1b	Review AHIMS searches	**Section 5.3**
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 5.2**
Requirement 4a	Develop predictive model	**Section 5.4**
Requirement 4b	Present predictive model results	**Section 5.4.3**
Requirement 5a	Archaeological survey sampling strategy	**Section 6.1**
Requirement 5b	Archaeological survey requirements	This Requirement was fulfilled during the undertaking of the survey.
Requirement 5c	Archaeological survey units	**Section 4.1.1**
Requirement 6	Site definition	**Section 5.4.1**
Requirement 7a	Site recording information to be recorded	**Section 6.3**
Requirement 7b	Site recording: scales for photography	All artefact photographs employed a centimetre scale bar.
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 6.5**
Requirement 10	Analyse survey coverage	**Section 6.2**
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 13a	Notifying Heritage NSW of breaches	Not applicable
Requirement 13b	Providing Heritage NSW with information	Not applicable
Requirement 14	Test excavation which is not excluded from the definition of harm	Test excavation did not take place.
Requirement 15a	Consultation regarding test excavation	Test excavation did not take place.
Requirement 15b	Developing a test excavation sampling strategy	Test excavation did not take place.
Requirement 15c	Providing Heritage NSW with notification of the test excavation	Test excavation did not take place.
Requirement 16a	Test excavation that can be carried out in accordance with the Code of Practice	Test excavation did not take place
Requirement 16b	Objects recovered during test excavations	Test excavation did not take place
Requirement 17	When to stop test excavations	Test excavation did not take place

2.6 DATE OF ARCHAEOLOGICAL ASSESSMENT

The field survey was undertaken by OzArk on 3 March 2022.

2.7 OZARK INVOLVEMENT

2.7.1 Field survey

The fieldwork survey was undertaken by:

- Archaeologist: Harrison Rochford (B. Liberal Studies [Hons], M. Phil. [Arts and Social Science]).

2.7.2 Reporting

The reporting component of the heritage assessment was undertaken by:

- Report author: Yekun Zhang (OzArk Archaeologist, MSc and PhD Australian National University). Archaeological and environmental background.
- Report author: Harrison Rochford. Fieldwork results, impact assessment and management.
- Reviewer: Ben Churcher (OzArk Principal Archaeologist, BA Hons, Dip Ed).

3 ABORIGINAL COMMUNITY CONSULTATION

3.1 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'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 50,000 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

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

The Aboriginal cultural heritage assessment of the Project has followed the ACHCRs (DECCW 2010b) since 2018. Logs and copies of correspondence with Aboriginal community stakeholders is available in previous ACHARs and addendums (Landskape 2019, OzArk 2019 and OzArk 2020).

The ACHAR Addendum 2 will continue the ACHCR stages that have already been undertaken. This ACHAR Addendum 2 will be distributed to the RAPs for the Project for review as per the Stage 4 procedure under the ACHCRs. The list of RAPs is restated below.

3.2.1 Registered Aboriginal Party List

The following groups or individuals have registered to be consulted as RAPs for the Project:

- Bathurst Local Aboriginal Land Council (LALC)
- Orange LALC
- Gundungurra Aboriginal Heritage Association Inc.
- Dhuuluu-Yala Aboriginal Corporation
- Gundungurra Tribal Council Aboriginal Corporation
- Wellington Valley Wiradjuri Aboriginal Corporation (WVWAC)
- Wiradjuri Traditional Owners Central West Aboriginal Corporation
- Neville and Region Landcare
- Gunjeewong Cultural Heritage Aboriginal Corporation
- Muragadi Heritage Indigenous Corporation
- Murra Bidgee Mullangari Aboriginal Corporation
- Warrabinga
- Nyree Reynolds

3.2.2 Consultation for the ACHAR Addendum 2

A draft version of the ACHAR Addendum 2 was sent to RAPs for review on 27 April 2022. The log for the Stage 4 consultation is provided at **Appendix Figure 1**. An example cover letter is provided in **Appendix Figure 2** and the response received from WVWAC is given in **Appendix Figure 3**.

3.3 CULTURAL VALUES IDENTIFIED THROUGHOUT THE ACHCR PROCESS

No specific cultural values concerning the study area have yet been identified by the RAPs. However, the strong cultural values of Aboriginal communities towards landscapes and cultural heritage sites are recognised. Comments received from WVWAC and Bathurst LALC representatives are incorporated in the assessment of significance in **Section 7**.

4 LANDSCAPE CONTEXT

An understanding of the environmental context of a study area is requisite in any Aboriginal archaeological investigation (DECCW 2010). 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 human-activated landscape processes, influence the degree to which the remains of material culture are retained in the landscape as archaeological sites; and the degree to which they are preserved, revealed and/or conserved in present environmental settings.

This section of the report only relates to the study area requiring additional heritage assessment: the 1.6 km of pipeline alteration. The remainder of the water supply pipeline alignment is assessed in OzArk (2019, 2020) and the mine development area in Landskape (2019).

4.1 TOPOGRAPHY

The study area is situated within the Bathurst Granites landscape unit (Mitchell 2002). The Bathurst Granites are characterised by undulating to steep hills with rock outcrops being common. The pipeline consists primarily of level plains and terraces with an elevation of 650 m to 700 m, though there are gentle to moderate slopes in the eastern side of the study area. **Figure 4-1** provides representative photographs of the predominant landforms of the study area.

Figure 4-1: Topography of the study area.

<table>
<tr>
<td>  </td>
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<tr>
<td>1. View east through the study area showing flats in the foreground, Evans Plains Creek in the midground and slopes in the background.</td>
<td>2. View west from the slopes in the east of the study area showing the undulating landscape.</td>
</tr>
</table>

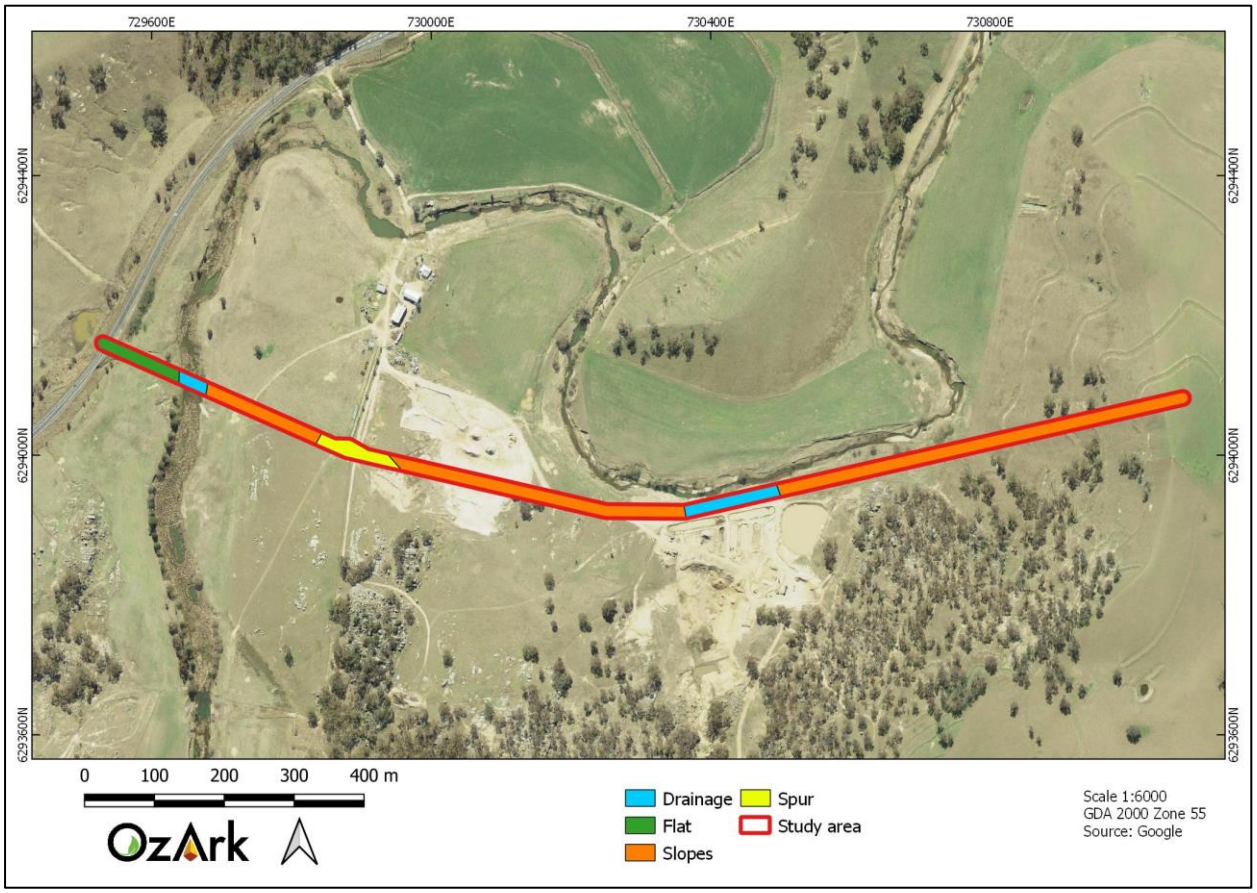
4.1.1 Survey units

Based on the topography of the study area, survey units were identified to capture the major topographical features of the study area. The designation of survey units will allow a comparison of the archaeological potential of each major topographical feature within the study area to understand whether certain landform types are more likely to contain Aboriginal objects than others.

Based on the preliminary landform mapping within the study area, the study area is classified into three main survey units (**Figure 4-2**):

- Flats: level plains within 200 m of Evans Plains Creek at the west of the study area.
- Slopes: gentle to moderate slopes across the study area.
- Spur: isolated level to gently sloping spur at the east of the study area.
- Drainage: Evans Plains Creek channel in the western end of the study area.

Figure 4-2: Aerial of the study area showing the location of survey units.



4.2 GEOLOGY AND SOILS

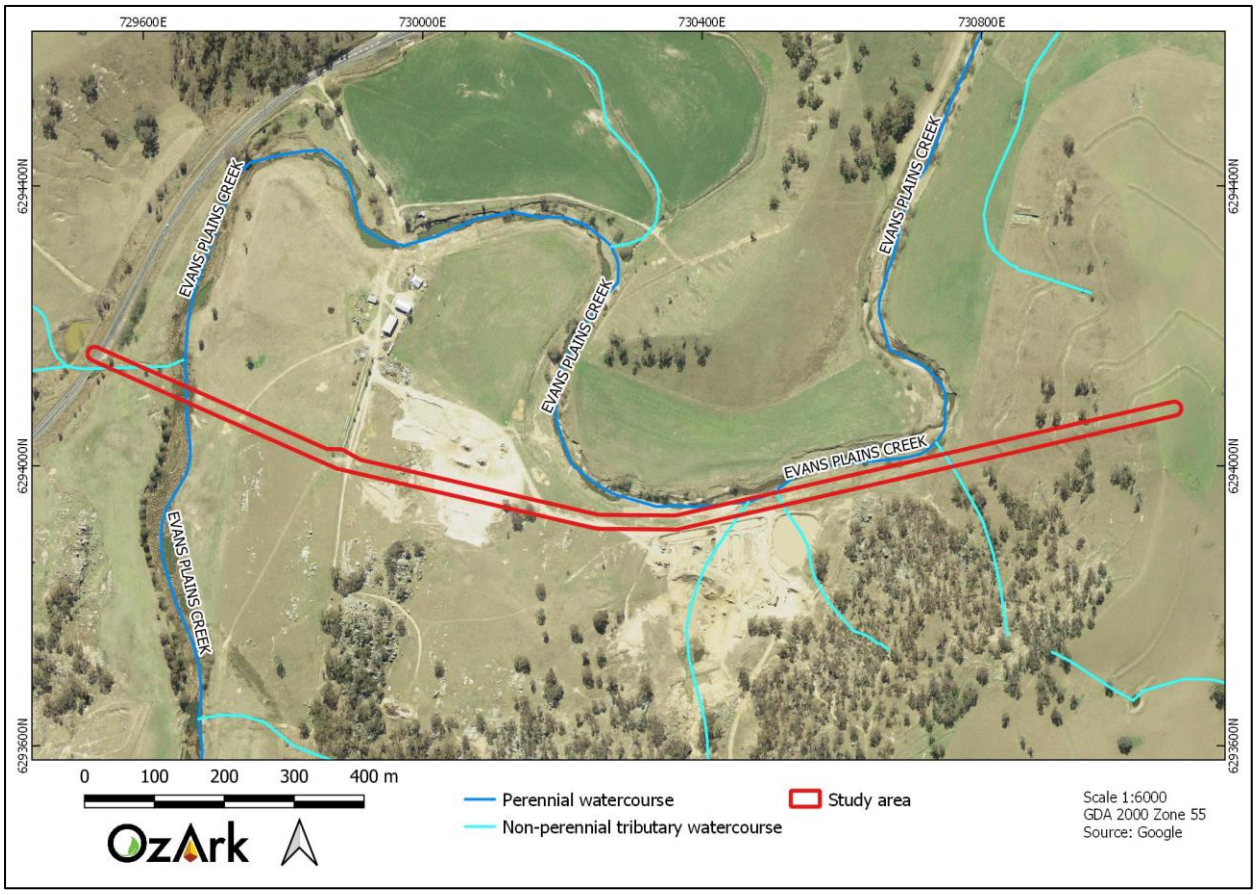
Soil analysis has important ramifications for archaeological research through the potential impact of different soils on human activity (such as agricultural exploitation) and the impact of the soils on archaeological evidence (such as post-depositional movement).

The Bathurst 1:250,000 Soil Landscape Map shows that the soil within the amended pipeline study area tends to be alluvial siliceous sands and black duplex soils, with a dark brown to yellowish brown loamy sand topsoil and a dull yellow-orange sand subsoil that are susceptible to moderate sheet erosion. Alluvium is derived from the Bathurst Granite and the southern province of the Angullong tuff.

4.3 HYDROLOGY

The closest named watercourse to the study area is Evans Plains Creek and some parts are located within 50 m north of the study area. The study area crosses several watercourses, including Evans Plains Creek in the western part and four unnamed tributaries watercourses in the eastern half and the western portion of the study area. **Figure 4-3** shows the location of the watercourses in relation to the study area.

Figure 4-3: Watercourses in relation to the study area.



4.4 VEGETATION

The study area is mostly cleared for agricultural cropping, as well as sheep and cattle grazing, with only scattered remnant trees and regrowth trees on slopes. Part of the study area is disturbed by a small quarry where all vegetation has been removed.

4.5 LAND USE HISTORY AND EXISTING LEVELS OF DISTURBANCE

Disturbance, historical or natural, potentially alters the archaeological record. It can do this in a variety of ways, directly or indirectly. For example, land clearing directly moves a particular site type: usually scarred trees or stone arrangements. Indirectly, land clearing accelerates soil erosion, potentially resulting in previously buried occupation and activity sites being exposed and altered or damaged.

The study area has moderate to high levels of disturbance mostly consisting of impacts related to the various types of land use, including vegetation removal, grazing, farm infrastructure, quarrying, and unsealed tracks.

Aerial imagery shows that the slopes leading down to Evans Plains Creek at the centre of the study area have been significantly affected by erosion, likely associated with the previous quarrying at the property (**Figure 4-2**).

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. Relative to surrounding landscapes it however, does not contain features such as a permanent water supply (Macquarie River) that are most likely to encourage substantial Aboriginal occupation of the landscape. As such, the size and density of sites located within the study area are likely to be smaller and sparser than those that are in closer proximity to Macquarie River.

- Geology and soils: landforms which typically comprise outcropping rock, are present within the vicinity of the study area. There is a potential that sources of stone procurement for tool manufacture are present. Soils present on the gentle slopes inside the study area are likely to have been affected by water erosion. The erosional qualities of the soils present will have influenced the likelihood for *in situ* archaeological deposits being present. Furthermore, the widespread and comprehensive use of most of the study area for agriculture and quarry would have further promoted soil erosion and losses.

- 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 Macquarie River. The broad-scale vegetation clearance which has taken place across the study area for agricultural and quarry purposes, reduces the likelihood that any culturally modified trees remain present, however, should mature native vegetation remain, particularly along Evans Plains Creek, culturally modified trees may be present.

- Land use: ground surface disturbances such as vegetation clearance, cultivation, grazing, and quarry 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.

Across the study area, the landform has undergone differing types of past and current land use applications and disturbances. High levels of ground surface disturbance across the entirety of the study area from activities such as vegetation clearance and quarrying would have affected the intactness of any deposit-based archaeological sites. Erosion of the topsoil, partly due to land clearing, agricultural and grazing practices, especially around creek banks, suggests objects are likely to be revealed by erosional processes. As such, unobtrusive sites such as open artefact scatters, where present, are likely to be disturbed and broad-scale vegetation clearance characteristics of the area reduces the likelihood of culturally modified trees being present. The topographic features which would be conducive to retention of archaeological deposits within the study area are terraces in the vicinity of semi-permanent water sources.

5 ARCHAEOLOGICAL CONTEXT

5.1 ETHNO-HISTORIC SOURCES OF REGIONAL ABORIGINAL CULTURE

At the time of European settlement, the Project area was situated within the territory of people belonging to the *Wiradjuri* tribal and linguistic group (Tindale 2000). The Wiradjuri tribal area is situated within the Murray Darling Basin and extends across three general physiographic regions: the highlands or central tablelands in the east, the riverine plains in the west, and the transitional western slopes zone in-between. The Project area is at the north-eastern extent of Wiradjuri territory.

The Wiradjuri is one of the largest language groups within NSW extending across the districts of Mudgee, Bathurst, Dubbo, Parkes, West Wyalong, Forbes, Orange, Junee, Cowra, Young, Holbrook, Wagga Wagga, Narrandera, Griffith, and Mossgiel (Tindale 1974). While the area was noted to have a single basic language, various dialects could be found throughout the region (Tindale 2000). The Project area is located within the central tablelands and on the eastern margin of the Wiradjuri territory.

Oral tradition records the presence of over 20 clans within the broader Bathurst–Mudgee region, organised according to matrilineal descent. Clans were made up of several fairly independent groups, of up to 20 members, in friendly contact with each other, moving separately for much of the year over a shared territory (Pearson 1981; Haglund 1985).

Within the Wiradjuri region, the presence of Aboriginal people in the Darling Basin has been dated to 40,000 years ago (Hope 1981 as cited in Haglund 1985). A spread east into the mountains is thought to have occurred between 14 000 to 12 000 years ago.

Pearson (1981: 81) suggests that one Wiradjuri clan occupied the Wellington area, another occupied the Bathurst region and another the Mudgee–Rylstone locale. It is acknowledged that use of the term ‘tribe’ and the delineation of ‘tribal boundaries’ on maps is problematic; however, distinctive ethno-linguistic groups are known to exist. Wiradjuri people travelled to the alpine regions of the South Eastern Highlands and Australian Alps bioregions for annual summer feasts of Bogong moths (Flood 1980).

Early accounts of contact between European and Aboriginal people in the Macquarie River area were provided by Oxley (1820) and Sturt (1834), and later by Garnsey (1942) who was born in Dubbo in 1874 (Whitehead 2003). Early references to Aboriginal people in the Orange and Wellington regions are provided by John Oxley, who passed by Limestone Creek, south of Mt Canobolas, on 12 April 1817, describing the area as "*a beautiful picturesque country of low hills and fine valleys well-watered*" (Whitehead 2003: 351). Further southwest, at the Lachlan River, Oxley met Aboriginal people carrying stone hatchets and possum skin cloaks. Oxley then returned to Bathurst along the Bell and Macquarie Rivers north of Orange in late August, passing near Wellington on 25 August 1817. Oxley noted the abundant natural resources in areas adjacent to the Macquarie River—including emus, ducks, swans, fish, and freshwater muscles—and that the country had an abundance of running water, with a spring on every hill (Rawson 1997: 8).

Garnsey's interest in local Aboriginal culture led him to record information gleaned from his father and from Wiradjuri Aboriginal elders in the Dubbo area. His work remains a useful account of everyday life and religious/ceremonial practices. Garnsey's (1942: 6) description of camp life suggests that many activities were performed communally, for the benefit of the mob. Campsites comprised a series of bark or bush shelters arranged in a semi-circle opening to the east, arranged around a central fire, with men occupying shelters to the north, women in the centre, and children to the south. Camps moved frequently over short distances due to alterations in social relations and weather, and in response to hygiene concerns, among other factors. Longer distance movements tended to be linked to participation in large-scale gatherings (e.g. ceremony or warfare) or alterations in resource availability. Garnsey (1942: 6–23) also provides detailed descriptions of ceremonial practices related to alterations in social status and passages from infancy to adulthood. These descriptions are a composite of various verbal accounts, the accuracy of which is difficult to ascertain. Garnsey (1942: 14) suggests that the 'mob' structure began to break down during the 1890s, by which time only older men appeared to retain the tribal markings and knowledge associated with ceremonial practice. Oral histories provided by traditional custodians are likely to elaborate upon and refute aspects of these early accounts.

In the early colonial period, relationships between the British and Aboriginal people were relatively amicable while there were few colonists. By the early 1820s the British population had increased and, in 1824, open war erupted between the Wiradjuri, under the leadership of Windradyne, including the government settlement in Bathurst and surrounding settlements (e.g. Orange, Wellington, and Mudgee). The conflict between the Wiradjuri and British settlers culminated in the death of two convict stockmen at Kings Plains. Windradyne was arrested and imprisoned for one month at Bathurst and it was reported that six men were needed to arrest Windradyne. Martial law was declared by Governor Brisbane soon after (Roberts 1995: 618–624). With civil law suspended, violence was officially sanctioned, and Governor Brisbane transmitted a proclamation to London that: "*It hath been found that Mutual Bloodshed may be stopped by the Use of Arms against the Natives beyond the ordinary Rule of Law... and for this End resort to summary justice has become necessary*" (cited in Roberts 1995: 622). On 14 October 1824 the *Sydney Gazette* reported that: "*Bathurst [and] its surrounding district is engaged in an exterminating war*" (cited in Roberts 1995: 623) and by October and November reports of Aboriginal people surrendering in groups of up to sixty were reaching Sydney. Martial law was repealed on 11 December 1824. Shortly after, relatively friendly relationships were established with the Wiradjuri, although subsequent history swayed between amenable and violent interactions (Kabaila 1998: 13–17).

5.2 REGIONAL ARCHAEOLOGICAL CONTEXT

Useful as a guide for generalised patterns of prehistoric Aboriginal occupation in the central west is a study undertaken by Pearson (1981) in the upper Macquarie region. The western boundary of Pearson's subject area was Wellington. Most of Pearson's field coverage was directed by information from informants and was thus skewed toward large or obtrusive sites, which had been recognised by local residents. Pearson excavated three rock shelter sites (Botobolar 5, and Granites 1 and 2) which provided a regional record of Aboriginal occupation dating back to around 5,000 years before present (BP). Pearson's analysis of the patterns of Aboriginal occupation involved an examination of site location characteristics in four sample areas.

According to Pearson, archaeological sites could be divided into two main categories, occupation sites and non-occupation sites (which included grinding grooves, scarred, or carved trees, ceremonial, and burial sites etc.). An analysis of the location of these sites led him to build a model for site prediction along the following lines (Pearson 1981: 101):

- Site distance to water varied from 10 to 500 m, but in general larger sites are found closer to water.
- Good soil drainage and views over watercourses are important site location criteria.
- Most sites were in contexts which would originally have supported open woodlands.
- Burial sites and grinding grooves were situated as close to habitation areas as geological constraints would allow.

- Ceremonial sites such as earth rings (“bora grounds") were located away from campsites.
- Stone arrangements were also located away from campsites in isolated places and tended to be associated with small hills or knolls or were on flat land.
- Quarry sites were located where stone outcrops with desirable working qualities were recognised and were reasonably accessible.

Based on ethno-historic information, Pearson suggests that Aboriginal campsites were seldom used for longer than three nights and that large archaeological sites probably represent accumulations of material over a series of short visits. The location of non-occupation sites was dependent on various factors relating to site function. For example, grinding grooves only occur where there is appropriate outcropping sandstone, but as close to the occupation site as possible. Scarred trees were variably located with no obvious patterning, other than proximity to watercourses, where camps were more frequently located.

In 2017, Extent Heritage conducted a regional Aboriginal heritage study for Bathurst LGA on behalf of Bathurst Regional Council (Extent 2017). This study found that 222 sites were registered on the AHIMS database as being located within Bathurst LGA, 216 (98%) of which were recorded as open sites. Extent (2017) found that artefact sites (artefact scatters and isolated finds) together constituted over half (55%) of all sites recorded, and that these were distributed throughout the entirety of the LGA (Extent 2017: 38–39). Other noteworthy observations include that stone arrangement sites have been recorded exclusively on elevated terrain above the valley of the Macquarie River in the central north of the LGA, and that culturally modified trees were relatively common in this area (15% of sites).

This study further conducted a program of predictive modelling to assess the likelihood of areas to contain archaeological sites based on landform characteristics and the proximity of significant landscape features. This modelling was then applied to divide the landscape of the Bathurst LGA into categories of archaeological sensitivity, from ‘nil to very high’. The landscape surrounding the study area has been assessed by the predictive modelling of Extent (2017) to be of varying archaeological sensitivity. Most of the study area is through low and moderate sensitivity areas.

5.3 LOCAL ARCHAEOLOGICAL CONTEXT

5.3.1 Desktop database searches conducted

A desktop search was conducted on the following databases to identify any previously recorded heritage items or sites within the study area. The results of this search are summarised in **Table 5-1** and presented in detail in **Appendix 2**.

Table 5-1: Aboriginal cultural heritage: desktop-database search results.

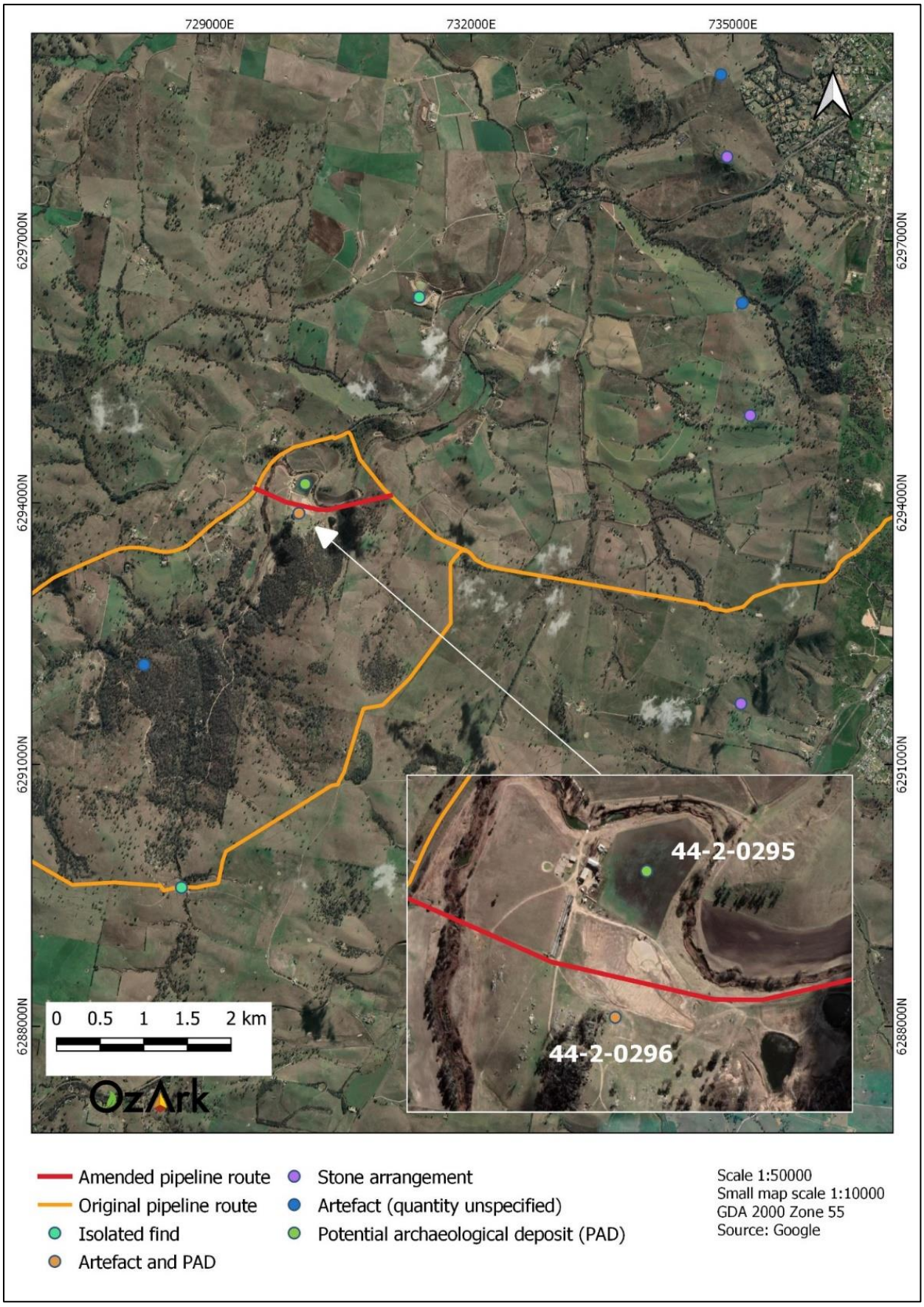
Name of Database Searched	Date of Search	Type of Search	Comment
Commonwealth Heritage Listings	4 February 2022	Bathurst LGA	No places listed on either the National or Commonwealth heritage lists are located within the study area
National Native Title Claims Search	4 February 2022	NSW	No Native Title Claims cover the study area.
AHIMS	4 February 2022	10 x 10 km centred on the study area	10 sites within the search area. None within the study area.
Local Environmental Plan (LEP)	4 February 2022	Bathurst LEP of 2014	None of the Aboriginal places noted occur near the study area.

A search of the AHIMS database conducted on 5 February 2022 returned 10 records for Aboriginal heritage sites within the designated search area (GDA Zone 55, Eastings: 725303–-735303, Northings: 6288921–6298921). **Figure 5-1** shows the location of the AHIMS sites that have been recorded near the study area. **Table 5-2** summarises the number and frequency of site type.

Table 5-2: Site types and frequencies in the AHIMS search results

Site Type	Number	% Frequency
Artefact (quantity unspecified)	3	30%
Stone arrangement	3	30%
Isolated find	2	20%
Artefact and PAD	1	10%
Potential archaeological deposit (PAD)	1	10%
Total	10	100%

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



5.3.2 Previous studies in or near the study area

There have been a number of development-driven assessments conducted in the Blayney and Bathurst areas. Only those assessments which are close or related to the study area of the pipeline have been summarised. For further information regarding local archaeological studies in relation to the entire Project see Landskape (2019) and OzArk (2019, 2020).

Kelton (2000) undertook a heritage assessment of the proposed Mid-Western Highway realignment near Kings Plains. During Kelton's assessment, two Aboriginal sites were recorded (KS-OS-1 [AHIMS #44-2-0121 and #44-2-0120] and KP-OS-2 [AHIMS #44-2-0122]). Both sites are artefact scatters. One existing potential archaeological deposit (PAD) was also noted, and two new PADs identified. Austral Archaeology (2004) completed test excavation at the sites Kelton (2000) recorded. The test excavation at these sites resulted in a small number of artefacts being recorded which are characteristic of the region.

Landskape (2019) conducted the Aboriginal cultural heritage assessment for the mine development component of the Project, located near Blayney. During this assessment nineteen stone artefact scatters and eighteen isolated finds of stone artefacts were recorded in addition to one previously recorded stone artefact scatter (AHIMS #44-2-0122). This assessment concluded that the Aboriginal cultural heritage sites that would be impacted by the mine development are not of high scientific or cultural significance.

OzArk (2019) conducted the Aboriginal cultural heritage assessment for the water supply pipeline development component of the Project. During this assessment, seven Aboriginal sites were recorded consisting of six isolated finds and one low-density artefact scatter. One previously recorded site, AHIMS #45-1-2723, was also located. The assessment concluded that the Aboriginal sites likely to be impacted by the pipeline development are not of high archaeological / scientific significance.

The OzArk (2020) assessment resulted in one Aboriginal site being recorded (Evans Plains Creek Tributary IF-01, AHIMS #44-5-0175) and two pieces of raw ochre identified. Evans Plains Creek Tributary IF-01 was located on a disturbed contour bank 90 m west of a tributary to Evans Plains Creek.

The results indicate that, despite clearing associated with agricultural practices in the regional area, Aboriginal sites are still likely to be located on landforms next to a permanent water source.

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 Site types in the region of the study area

The site types listed in **Table 5-3** are present in the region of the study area. The likelihood of these sites being present in the study area is discussed in **Section 5.4.3**.

Table 5-3: Site types recorded in the region of the study area.

Site type	Site description
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 subsurface artefact scatter. They may occur anywhere within the landscape but are more likely to occur in topographies where open artefact scatters typically occur.
Open artefact scatters	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.

Site type	Site description
Culturally modified trees	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.
Quarry sites	Typically consist of exposures of stone material where evidence for human collection, extraction and/or preliminary processing has survived. Typically, these involve the extraction of siliceous or fine grained igneous and meta-sedimentary rock types for the manufacture of artefacts. The presence of quarry/extraction sites is dependent on the availability of suitable rock formations.
Hearths/ovens	Features used by Aboriginal people for the preparation of food and would generally be in the vicinity of available resources, such as water sources to procure fish and shellfish, and on elevated ground to avoid impact from environmental threats.
Burials	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.
Bora/Ceremonial sites	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.

5.4.2 Landform modelling of archaeological potential

The large number of archaeological studies undertaken within the vicinity of the Project provides a suitable understanding of the nature and distribution of archaeological sites within the area. Although there is some conjecture about the relationship between stream order, site numbers and densities, the general pattern is that most sites are present close to watercourses, in locations that have been subject to reduced landform disturbance, and on gentle, elevated landforms. However, landform disturbance may also explain why Aboriginal objects become revealed on the ground surface, such as within modified and disturbed landforms.

As the study area is linear and narrow, it traverses several landforms, including plains and slopes, all of which are dissected by several waterways. The highest order waterway intersected by the study area is the Evans Plains Creek (**Figure 4-3**); a landscape feature that would have encouraged past Aboriginal occupation. Prime occupation locations are limited to elevated terraces adjacent to water, should these exist within the study area.

5.4.3 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 landforms within the study area containing Aboriginal objects (**Table 5-4**) and what types of sites may be present within the study area (**Table 5-5**).

Previous archaeological studies indicate that artefact scatters and isolated finds will possibly be recorded within the study area, especially on well drained landforms adjacent to permanent or semi-permanent water sources. The main types of raw materials for artefacts recorded during archaeological assessments are quartz, chert, silcrete, volcanic material and tuff.

Near the study area, over half of the previously recorded sites are comprised of stone artefact sites of varying sizes in open contexts. The next main category of sites is stone arrangements, comprising of 30% of site types. Two PAD sites are also recorded in the vicinity of the study area.

The topography of the study area is primarily gentle to moderate slopes with one named creek and four ephemeral tributaries intersecting the study area. The flat and slope landforms would have been hospitable to Aboriginal people, however, relative to surrounding landscapes it does not contain features such as a permanent water supply (the Macquarie River) that are most likely to encourage substantial Aboriginal occupation of the landscape. As such, the size and density of sites located within the study area are likely to be smaller and sparser than those to the north which are in closer proximity to the Macquarie River. Compared to the gentle slope or flat landforms within the study area, artefact sites are more likely to be recorded in the vicinity of watercourses.

Table 5-4: Likelihood of identified landforms to contain Aboriginal sites.

Survey Unit	Landform type	Likelihood to contain Aboriginal objects
1	Flats	Flats (plains) are an aggrading environment that are impacted by flooding and channel migration. While floodplains would have provided resources to encourage occupation and use in the past, their geomorphic nature makes them poor preservers of archaeological deposits and any objects in such landforms are likely to be in a secondary context.
2	Slopes	Slopes are a degrading landform, especially in the study area where vegetation removal has accelerated soil loss. These landforms are unsuitable for occupation and Aboriginal objects recorded in such landforms are likely to be in a secondary context. The exception is in localised flat benches, if they are present, where occupation may have been possible.
3	Spur	Spurs and ridges are generally a degrading landform, although some can be stable or feature aggraded material from further upslope. Gently sloping spurs and ridges are suitable for habitation sites and may provide desirable features, such as visibility and microclimates distinct from surrounding landforms.
4	Drainage	Creek landforms can be either aggrading or degrading in general, although aggrading hydrological environments are usually defined as floodplains or lake edges. Modified trees and geological sites such as quarries or grinding grooves are thought the be the only possible site types to occur within this landform.

Table 5-5: Likelihood of certain site types being present in the study area.

Site type	Likelihood of being present in the study area
Isolated finds	As isolated finds can occur anywhere, particularly within disturbed contexts, it is predicted that this site type could be recorded within the study area.
Open artefact scatters	Stone artefact distributions of variable artefact densities is the most common Aboriginal object found within the region. A general correlation between landform and the nature of the evidence of past Aboriginal occupation is evident. Higher artefact density sites are located on elevated landforms adjacent to waterways. The study area contains one named creek and four unnamed tributaries. It is considered to have a moderate archaeological potential in the locations associated with Evans Plains Creek.
Culturally modified trees	Due to the near-total clearance of trees from within the study area, this site type is predicted to be very rare. It is also noted that this site type is very rare at a regional level.

Site type	Likelihood of being present in the study area
Quarry sites	This site type could be recorded within the study area should suitable rock outcroppings be available.
Grinding grooves	Where there is suitable outcropping sandstone rock, there is the possibility for there to be grinding grooves. However, this site type tends to be associated with more mountainous areas in the region, and it is assessed that this site type is unlikely to be recorded within the study area.
Hearths/ovens	This site type is considered possible in areas where A-Horizon soils are relatively undisturbed. However, given the high levels of disturbance across the study area the likelihood of identifying this site type *in situ* is significantly reduced.
Burials	Although it is possible that this site type could be found within the study area, it is considered a rare site type especially given the disturbance that has occurred within the study area.
Bora/Ceremonial sites	This site type does not necessarily follow landform predictability and are, overall, a rare site type with a low likelihood of being present and remaining extant. These sites are generally identified through consultation with the RAPs.

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

Standard archaeological field survey and recording methods were employed in this study (Burke & Smith 2004). As per the assessment methodology, full pedestrian coverage of the study area was undertaken.

The survey component of the assessment was completed on 3 March 2022 by Harrison Rochford (OzArk archaeologist) and Tina Scott (Bathurst LALC field officer).

There were no significant constraints that prevented effective assessment of the study area.

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 this ACHAR Addendum 2, 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 specific landform units.

For example, the spur landform contained a vehicle track and cleared stock yard, which resulted in large exposures of the ground surface (approximately 50% of the area). Within these exposures, there was little leaf litter or loose stone concealing the ground surface, allowing for very good visibility (approximately 80% of the ground surface). Multiplying these estimates together gives the total 'effective coverage area' of the survey team over the survey unit/landform.

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

Survey Unit	Landform	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)
1	Flats	2504	40	30	301	12
2	Slopes	20230.5	80	40	6474	32
3	Spur	2275	80	50	910	40
4	Drainage	3499	30	20	210	6

Table 6-2 demonstrates that higher effective survey coverage is correlated with the identification of an Aboriginal objects. There was generally high effective coverage across the spur and slopes landforms, although only the spur landform recorded Aboriginal objects. The lower rates of effective coverage within drainage and flat landforms may have concealed Aboriginal objects, however, there were sufficient exposures (20% and 30% respectively) to have confidence in the archaeological assessment at these areas.

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
Flats	2504	301	12	0	0
Slopes	20230.5	6474	32	0	0
Spur	2275	910	40	1	6
Drainage	3499	210	6	0	0

6.3 ABORIGINAL SITES RECORDED AT THE STUDY AREA

One Aboriginal site was identified during the survey of the study area, which has been recorded as an extension of the previously recorded site Swan Ponds Quarry 1 (AHIMS #44-2-0296). The original site locations are shown on **Figure 6-2** and the relationship of the newly recorded artefacts to the existing sites is shown on **Figure 6-3**. **Table 6-3** summarises the details of the site and further details follow.

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

AHIMS ID	Site name	Site type	Coordinates (GDA Zone 55) East	Coordinates (GDA Zone 55) North	Survey Unit
44-2-0296	Swan Ponds Quarry 1	Artefact scatter with PAD	729865	6294005	3

Swan Ponds Quarry 1 (AHIMS #44-2-0296)

Site type: Artefact scatter

GPS coordinates: GDA Zone 55 729865E 6294005N

Location of site: The site is located on a low spur to the south of Evans Plains Creek, 5 km southwest of the township of Evans Plains. The site is on private property 350 m east of the Mid-Western Highway.

Description of site: The site is a scatter of at least six artefacts in a secondary context. The artefacts were identified on a stock damaged exposure adjacent to an access gate and trough. Most artefacts are volcanic flakes, which the Bathurst LALC representative noted were unlikely to be locally available, and two quartz flakes which are likely to be sourced locally. The site and artefacts are shown on **Figure 6-1**.

The artefacts are considered to be part of a site was originally recorded in 2017 by Navin Officer Heritage Consultants that encompassed a larger area than the study area for this ACHAR. The Navin Officer (2018) report notes 12 artefacts over a 170 m x 280 m area, noting that a larger area (190 m x 450 m) had moderate potential for subsurface deposits.

During the 2022 survey of the study area, artefacts were only identified on smaller exposures across a 50 m x 20 m area that are to the east of the PAD and artefact location shown on **Figure 6-2**. The artefacts within this area have been disturbed from their original depositional context and their current position on a stock trampled surface adjacent to a gate has low potential for subsurface deposits. The implications of this conclusion for the project are discussed in **Section 6.5.1**.

Table 6-4: Swan Ponds Quarry 1 artefact attributes.

Artefact type	Raw material	Artefact integrity	Stage of reduction	Size (LxWxD) mm
Flake	Basalt	Complete	Tertiary	15x10x5
Flake	Basalt	Complete	Tertiary	40x30x9
Flake	Basalt	Complete	Tertiary	10x5x5
Flake	Basalt	Distal fragment	Tertiary	19x22x4
Flake	Quartz	Complete	Tertiary	50x35x10
Angular shatter	Basalt	N/A	Tertiary	40

Figure 6-1: Swan Ponds Quarry 1. View of site and a selection of recorded artefacts.

<table>
<tr><td>  </td><td>  </td></tr>
<tr><td>1. View west through the site showing the gentle slope towards Evans Plains Creek in the background.</td><td>2. View east at the site showing the disturbed sandy soil and high levels of ground surface visibility.</td></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>3. Basalt flake at Swan Ponds Quarry 1.</td><td>4. Quartz flake and basalt flake at Swan Ponds Quarry 1.</td></tr>
</table>

Figure 6-2: Artefact locations (AL) at Swan Ponds Quarry 1 recorded by Navin Officer (2018).

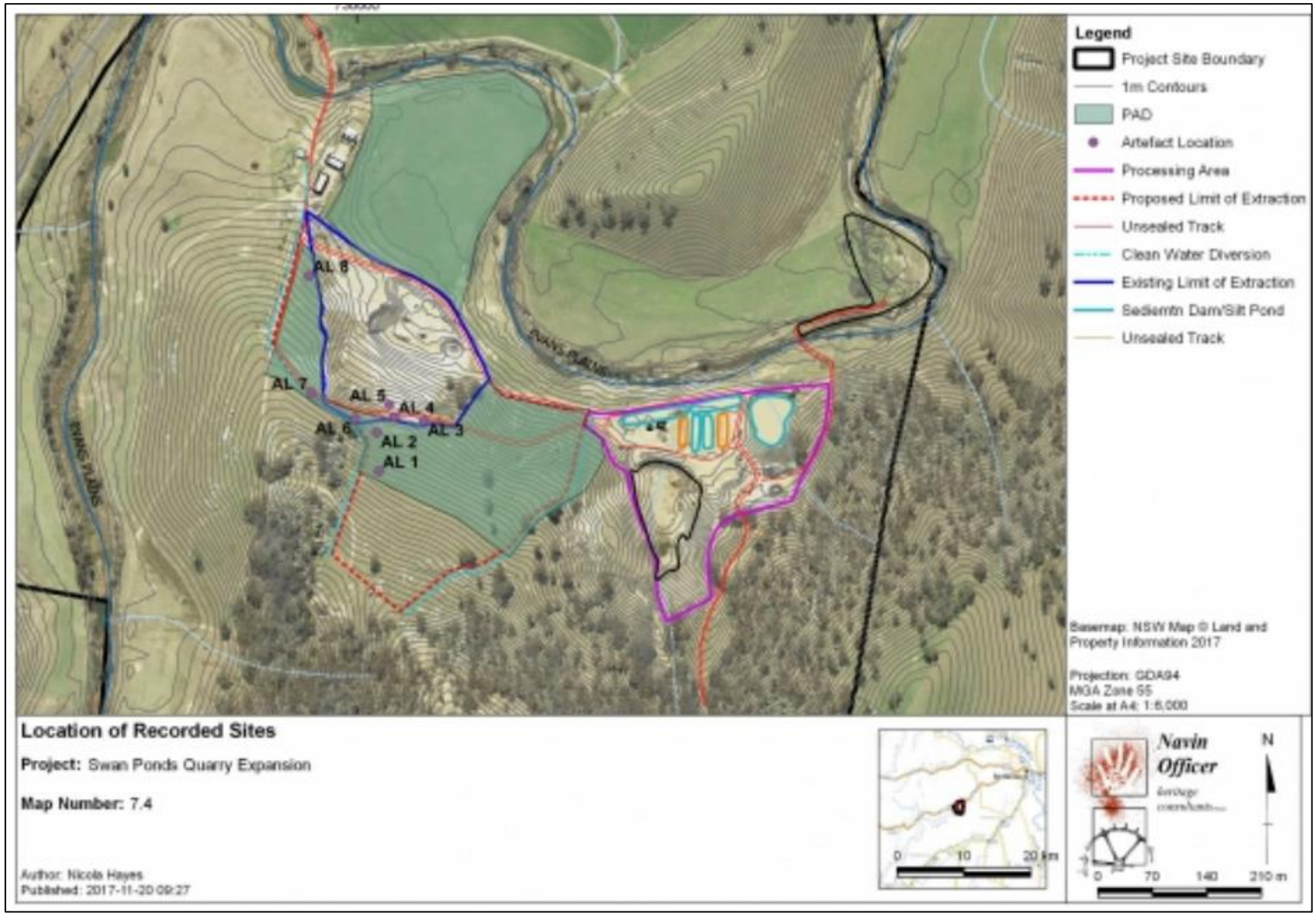
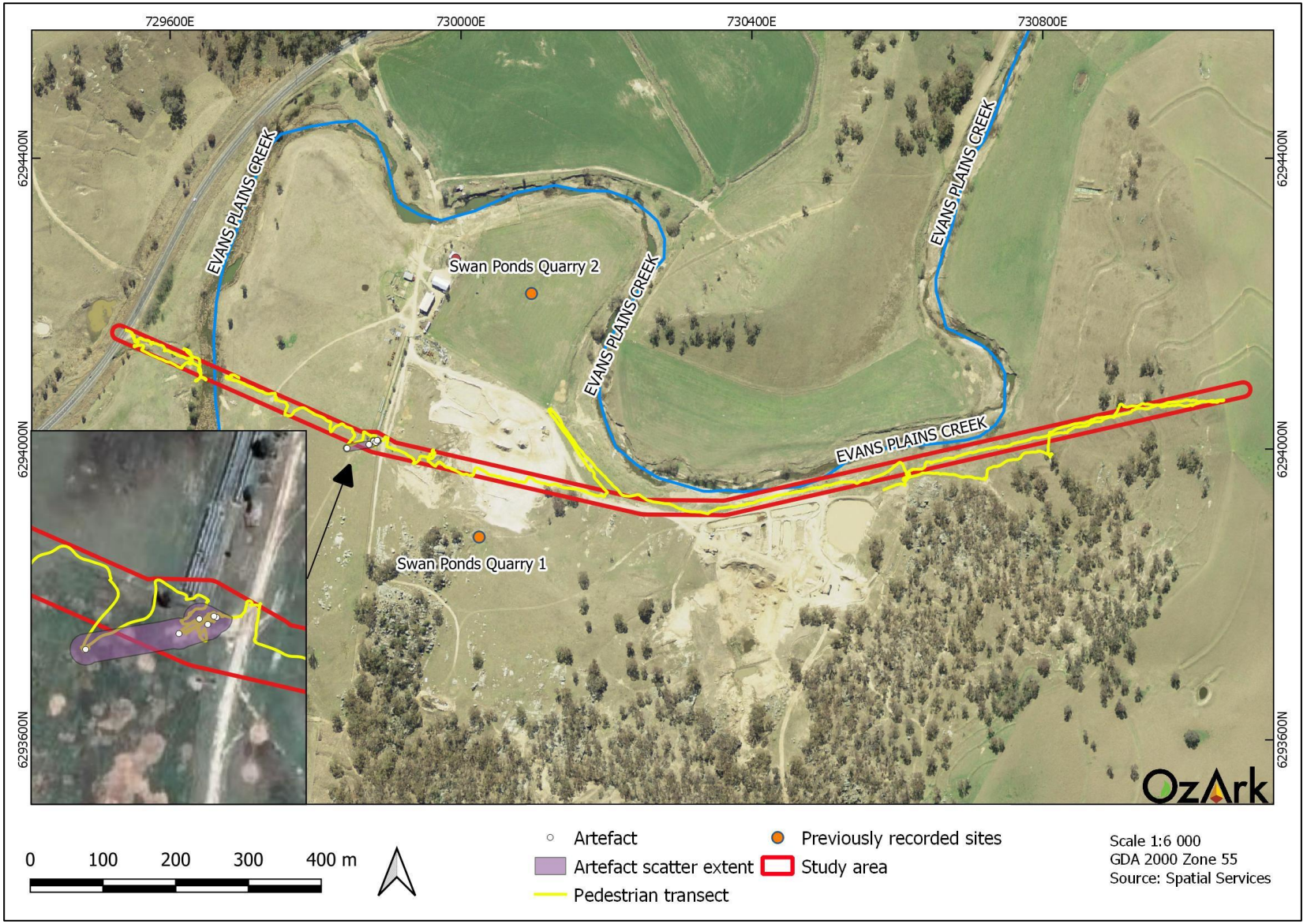


Figure 6-3: Artefact locations and previous site recordings in relation to study area.



6.4 PREVIOUSLY RECORDED ABORIGINAL SITES LOCATED NEAR THE STUDY AREA

One previously recorded AHIMS site (AHIMS #44-2-0295) near the study area (Swan Ponds Quarry 2) was also located during the survey (see **Table 6-5**). The location was ground-truthed to confirm that the PAD is outside the study area and will not be harmed by the Project. The site recording is accurate and does not require updating.

Table 6-5: Aboriginal cultural heritage sites recorded during the survey.

AHIMS ID	Site name	Site type	Coordinates (GDA Zone 55) East	Coordinates (GDA Zone 55) North
44-2-0295	Swan Ponds Quarry 2	PAD	730096	6294214

Swan Ponds Quarry 2 (AHIMS #44-2-0295)

Site type: Potential artefact deposit

GPS coordinates: GDA Zone 55 730096E 6294214N

Location of site: Site is located on low floodplains and terraces along the banks of Evans Plains Creek north of the former Swan Ponds Quarry, 5 km southwest of the township of Evans Plains.

Description of site: The recorded PAD is a 195 m x 300 m area within a grazing paddock located on floodplains and terraces adjacent to Evans Plains Creek. The original recording by Navin Officer notes that there is moderate potential for subsurface artefacts through this area, likely disturbed by ploughing. The site is shown in **Figure 6-4**.

The condition of the site in 2022 appears to be identical, although the potential for subsurface deposits cannot be further commented due to lack of visibility.

Figure 6-4: Swan Ponds Quarry 2. Views of PAD site.

1. View northwest through Swan Ponds Quarry 2 from the site card (Navin Officer 2018).

2. View from the same point during the 2022 survey.

6.5 SUMMARY OF SURVEY RESULTS

There was one location with Aboriginal artefacts recorded during the survey. The location is most likely a part of the previously recorded site, Swan Ponds Quarry 1.

Survey efficacy at the study area was generally high, despite some areas with very limited ground surface visibility.

6.5.1 Discussion

The predictive model for site location expected artefact scatters to be the most likely site type to be encountered, with the likelihood increasing in proximity to watercourses.

The presence of an artefact scatter within the study area conforms to the predictive model in general. However, isolated, flat areas on the spur of the rolling hills of the area appear to be more of a determining factor in site location than proximity to water. It is possible that post-depositional disturbances have significantly altered this archaeological profile. Sites may have also been present on the lower slopes to the east of the identified artefacts but gully and sheetwash erosion has removed any potentially artefact bearing topsoil from this landform.

While the location and description of the previously recorded site Swan Ponds Quarry 1 has been determined to be accurate, it may be that only certain aspects of the site recording are relevant to the study area. **Figure 6-2** appears to show some areas of identified PAD within the study area to the east of the artefacts recorded during this ACHAR Addendum 2. However, the potential for the depleted soil profile in this area to retain subsurface artefacts was assessed to be low during the survey. It is possible that additional erosion disturbance over the four years since the original recording of the site has impacted its condition. **Figure 6-5** shows the condition of the site during the 2017 survey compared with the condition recorded in 2022. While it is beyond the scope of this report to reassess the potential for subsurface deposits across the entire Swan Ponds Quarry 1 site extent, within the 20 m wide study area the disturbances to the ground surface are such that the potential for intact archaeological deposits has been assessed as low.

Figure 6-5: Swan Ponds Quarry 1 within the study area.

	
1. View north through Swan Ponds Quarry 1 from the site card (Navin Officer 2018).	2. View south up the slope to where the original site card photo (left) was taken. Within the study area, the A-horizon soils are depleted from the erosion visible in this image.
	
3. View east along the proposed pipeline alignment showing the	4. Exposed B-horizon soils within the study area.

6.5.2 Responses to the research questions

In **Section 5** several research questions were advanced to guide the survey of the study area. Following the survey, responses to these research questions are set out 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?
    - The landscape of the study area appears to have afforded a range of reliable resources and characteristics to the Aboriginal people of the area. Food in the form of game and birds is likely to have been reliable, and some stone material (quartz) would have been available. The granite recently quarried from the site is unlikely to have been a desirable resource for the Aboriginal population pre-contact.
- How do the raw materials recorded within the study area compare to those in recorded in the surrounding region?
    - The basalt used to make the artefacts within the study area was noted not to have come from a known local source by the Aboriginal community representative. Volcanic stone is known to occur in the broader Bathurst region, indicating transport and/or trade in the material by the local populations.
- Establish how the findings within the study area (if any) accord with the regional archaeological context examined in **Section 5.2**.
    - The results of the survey largely conform to the predictive model developed from the findings of studies in the region. The results suggested that proximity to water may be less important in determining site location than the presence of elevation above drainage areas and/or the presence of level ground.

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 (Australia ICOMOS 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 to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (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. As 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

Scientific (archaeological) value 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 (Australia ICOMOS 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 can include:

- 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 the Code of Practice (DECCW 2010).

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

Aesthetic value 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 (Australia ICOMOS 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 7-7-1 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

While the high cultural importance of all Aboriginal sites was underlined by Tina Scott (Bathurst LALC) during the assessment, the poor condition of the study area was also noted. Nevertheless, the objects recorded are evidence of the interaction of past Aboriginal people with their cultural landscape, and the value of the site to current and future members of the community is best described as high.

WVWAC provided the following comment regarding social and cultural significance (see **Appendix Figure 3**):

> *We Cannot speak to the Archaeological Scientific Value, however Anthropologically these artefacts have a Moderate Academic Value in mapping and understanding Social and Cultural use of the varying materials and site locations selected, from being opportunistic to defined by patterns of seasonal and or generational use and compared to the wider landscape and the other known sites within a 50km radius gives us a greater Anthropological View and information to the Clan use of land and their relationships with surrounding Clans.*

Archaeological/Scientific Value

Swan Ponds Quarry 1 is a low-density scatter of artefacts that have been displaced from their original context. There is low potential for further research at the site to provide new information regarding the archaeology of the region. As such, the site is considered to have low archaeological value.

Aesthetic Value

While the local pastoral landscape of rolling hills has aesthetic appeal, the site of Swan Ponds Quarry 1 within the study area is considered to have low aesthetic value.

Historic Value

There are no known associations between Swan Ponds Quarry 1 and any significant post-contact historical figures or values.

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

Site Name	Social or Cultural Value	Archaeological / Scientific Value	Aesthetic Value	Historic Value
Swan Ponds Quarry 1	High	Low	Low	None

7.2.1 Statement of significance

Intangible Aboriginal cultural values across the wider cultural landscape do intersect with the study area. Aboriginal sites, regardless of their level of disturbance or archaeological value, do have an important place in the landscape of culturally significant geographical features, such as Wahluu/Mount Panorama and Mount Apsley, both located approximately 5 km to the east of the study area. No specific locations that hold particular cultural values were identified at the study area during this ACHAR process.

The recorded site Swan Ponds Quarry 1 is considered to have low archaeological significance as it provides limited new information on the characteristics of Aboriginal life across the Bathurst tablelands region. However, the moderate–high cultural significance of the Swan Ponds Quarry 1 for the current community's appreciation of past habitation of the landscape is acknowledged. There are no known or identified historic or aesthetic values of significance associated with the study area.

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*' (section 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; and
- 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 heritage values

The construction impacts of the amended Project have been designed to limit surface disturbance as far as possible.

The adjacent PAD (Swan Ponds Quarry 2) would not be harmed by the Project. The site within the study area, Swan Ponds Quarry 1, would also be avoided. Following assessment of the study area, the proponent has revised the pipeline alignment within the study area to avoid the Swan Pond Quarry 1.

A 50 m area of the PAD associated with Swan Ponds Quarry 1 is within the proposed impact footprint of the pipeline. However, this assessment concludes that the portion within the study area is not likely to retain intact archaeological deposits. The remainder of the 190 m x 450 m PAD area would be unaffected by the proposal and would remain undisturbed.

8.2 LIKELY IMPACTS TO ABORIGINAL HERITAGE FROM THE PROPOSAL

Table 8-1 presents a summary of potential impacts to Aboriginal cultural heritage associated with the proposal.

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)
Swan Ponds Quarry 1	None	None	None
Swan Ponds Quarry 2	None	None	None

8.3 ECOLOGICALLY SUSTAINABLE DEVELOPMENT PRINCIPLES

Ecologically sustainable development principles (ESD) (defined in section 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 that may 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 proposal.

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

8.3.2 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 heritage values, the precautionary principle should be guided by whether:

- The proposal involves a risk of serious or irreversible damage to Aboriginal objects or places or to the value of those objects or places; and
- 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.

8.3.3 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; and
- Development needs are to be considered in applying environmental objectives.

8.3.4 Applicability to the Project

There is a very low impact to Aboriginal cultural heritage values as the one Aboriginal site potentially partially affected by the Project would be avoided, and there have been no intangible heritage values identified within the study area. The results of the assessment indicate that significant Aboriginal cultural heritage values would not be harmed within the study area.

WVWAC provided the following comment regarding the application of ESD principles relevant to Aboriginal cultural heritage (see **Appendix Figure 3**):

> *Given the Project Manager has undertaken to avoid the majority of cultural sites and areas of habitat. WVWAC Members and knowledge Holders are of the opinion and agree that the Intergenerational Equity loss and impact to cultural sites will be minimized although the site will be partially harmed.*

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	**Section 9** sets out mechanisms by which to avoid and minimise potential harm to nearby Aboriginal sites. In particular, measures would be made to avoid harm to the areas of Swan Ponds Quarry 1.
The integration principle	The integration principle has been followed by developing a robust understanding of the environmental impacts of the Project so that it can be accurately assessed.
The precautionary principle	The Aboriginal cultural heritage investigation has followed the precautionary principle though undertaking a robust Aboriginal cultural heritage assessment to ensure that potential harm to Aboriginal objects and values is understood. The survey adopted a precautionary principle when it came to describing and assessing landforms within the study area.
The intergenerational equity principle	The cumulative impacts on Aboriginal sites that may result from the Project is considered to be low and would be mitigated by the ongoing program of archaeological recording and salvage recommended by the previous assessments (Landskape 2019, OzArk 2019 and 2020). It is assessed that the Project would not harm significant Aboriginal cultural heritage values and that there would not be a diminution of intergenerational equity should the site recorded be partially harmed.

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 Project. **Section 7.2** and **Section 8.2** describe, respectively, the significance / potential of the recorded sites and the likely impacts of the Project. 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 Project to avoid impact to a recorded Aboriginal site (e.g. Swan Pond Quarry 1). If this can be done, then a suitable curtilage around the should be provided to maintain the protection during both 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 appropriate management of the site/object will be determined through policies set out in an ACHMP. The ACHMP should include measures for site conservation, as well as detailing methods for the management of sites to be impacted. The management will depend on many factors including the assessed significance of the sites (**Section 7**). In certain instances, a site may have low archaeological, aesthetic, and historic values but moderate or high cultural value. In these cases, management is aimed to mitigate the loss of the cultural heritage values, rather than the loss of the scientific values. Sites of low scientific significance, such as an isolated find, could, from an archaeological perspective, be removed/destroyed with no further archaeological management being required. However, given the site's cultural value, further management in respect to these sites will be recommended here. For example, due to a site's cultural values, the local Aboriginal community may wish to collect or relocate artefacts, whether temporarily or permanently, and such management will form part of the ACHMP. The ACHMP would be developed in consultation between the proponent, RAPs, and DPE.

9.2 MANAGEMENT AND MITIGATION OF THE RECORDED ABORIGINAL SITE

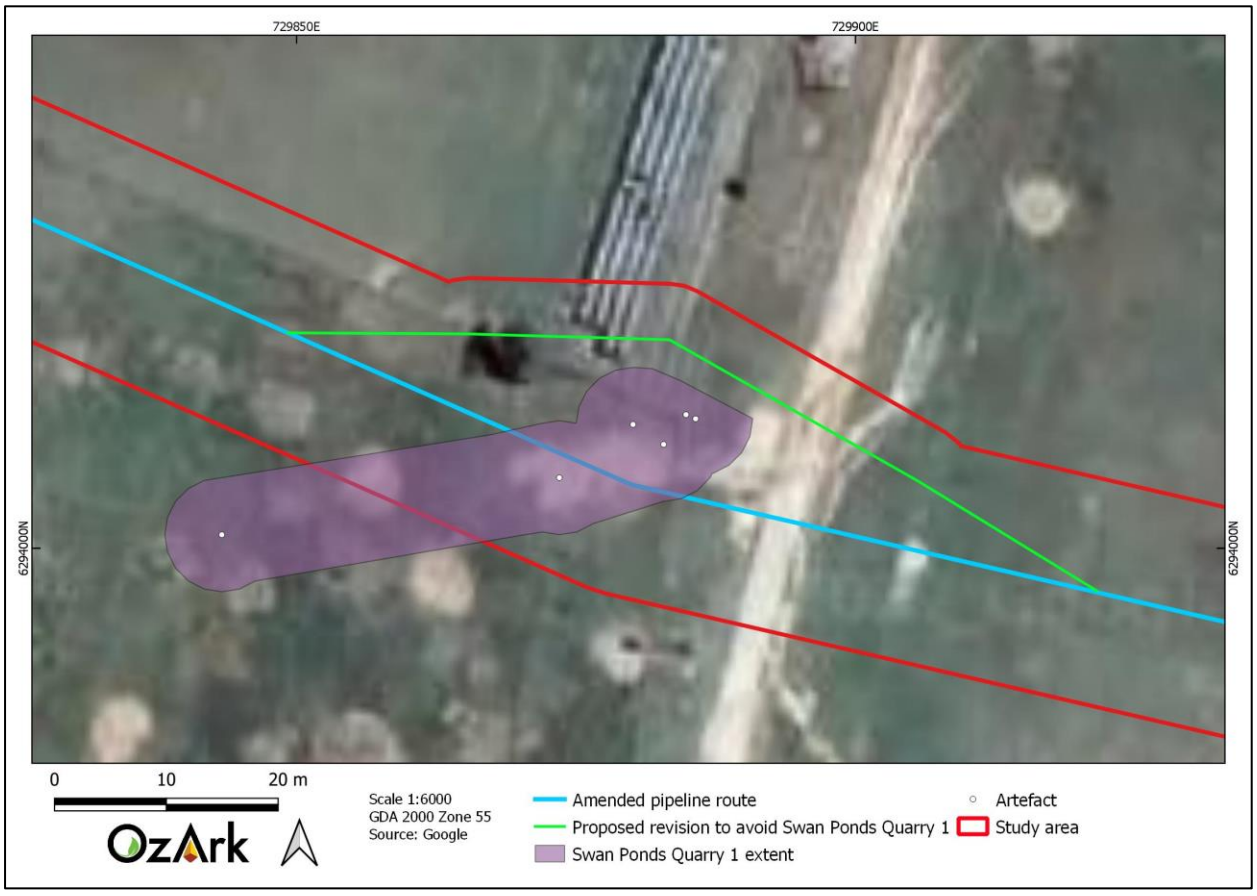
9.2.1 Management of Swan Ponds Quarry 1 (AHIMS #44-2-0296)

The proponent has redesigned the Project to avoid impacts to Swan Ponds Quarry 1 (AHIMS #44-2-0296). However, works would be undertaken near the site and management measures should be implemented to maintain protection of the site.

This includes fencing the boundary of the site with high visibility temporary fencing and placing signs to indicate that all areas beyond the fence is a no-go zone for personnel, vehicles and the storage of equipment. The purple buffer in **Figure 9-1** is suitable for this purpose.

Alternatively, the location of Swan Ponds Quarry 1 in the north-east corner of a fenced paddock could be used as exclusion zone. The artefact extent does not continue to the north or the east of the double gate shown in **Figure 6-1**. As such, the existing fencing could be used to demarcate the site at the south from the work area to the north. The proposed revision to the pipeline route would avoid impact to the identified artefacts at the site (see **Figure 9-1**)

Figure 9-1: Proposed revision of impacts to avoid Swan Ponds Quarry 1



9.2.2 Unanticipated finds

The assessment has concluded that there is a low likelihood of impact to Aboriginal sites within the study area. However, as adjacent areas have been previously assessed as having potential for archaeological deposits and as accepted practice, an unanticipated finds protocol must be in place for the Project. The ACHMP developed in consultation between the proponent, RAPs, and DPE will outline specific measures to be taken in the event that unanticipated Aboriginal heritage items are encountered during works. Recommendations for these measures are outlined in OzArk (2019: 83) and OzArk (2020: 73). Attention should always be given to the protocol, but extra care is warranted during works along the 45 m route that has been redesigned to avoid Swan Ponds Quarry 1.

9.2.3 Management of identified Aboriginal cultural values

It has been noted by the previous assessments, and supported by this ACHAR Addendum 2, that significant cultural values will not be impacted by the pipeline alignment. An ACHMP would be developed in consultation with the RAPs and would include appropriate protocols to be followed in the unlikely event that any unidentified Aboriginal heritage items (particularly any associated with the Bathurst Wars) be discovered during construction.

10 RECOMMENDATIONS

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; and
- The interests of the Aboriginal community.

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

1. This report should be read in conjunction with Landskape (2019), OzArk (2019) and OzArk (2020) as their recommendation, management and mitigation measures are relevant to the study area.
2. Should development consent for the Project be granted, archaeological management strategies to manage the proposed works adjacent to Swan Ponds Quarry 1 (AHIMS #44-2-0296) presented in **Section 9** should be followed.
3. All land-disturbing activities must be confined to within the assessed study area. Should the parameters of the proposed work extend beyond this, then further archaeological assessment may be required.
4. If the amended Project is approved and development consent is issued under Part 4 of the EP&A Act, an Aboriginal Heritage Impact Permit (AHIP) would not be required, as AHIPs are not required for SSD pursuant of section 4.41 of the EP&A Act. Management of Aboriginal cultural heritage would be managed through an ACHMP which is to be agreed to by the proponent, RAPs and DPE. The archaeological management recommendations within this report would normally be incorporated into the ACHMP that is usually formulated following development consent. The ACHMP will also include an unanticipated finds protocol, unanticipated skeletal remains protocol, and long-term management of any salvaged artefacts. The ACHMP should also include a protocol should tangible evidence associated with the Bathurst Wars be noted during construction to ensure that any such evidence is appropriately managed.

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APPENDIX 1: ABORIGINAL COMMUNITY CONSULATION

Appendix Figure 1: Addendum Aboriginal Community Consultation Log

Addendum Aboriginal Consultation Log - McPhillamys			
Date	**Organisation**	**Communication**	**Contact type**
27.4.22	Orange Local Aboriginal Land Council	Harrison Rochford (HR) sent Stage 4 project update letter and draft ACHAR	Email
27.4.22	Bathurst Local Aboriginal Land Council	HR sent Stage 4 project update letter and draft ACHAR	Email
27.4.22	Dhuuluu-Yala Aboriginal Corporation	HR sent Stage 4 project update letter and draft ACHAR	Email
27.4.22	Gundungurra Aboriginal Heritage Association Inc	HR sent Stage 4 project update letter and draft ACHAR	Email
27.4.22	Gundungurra Tribal Council Aboriginal Corporation	HR sent Stage 4 project update letter and draft ACHAR	Email
27.4.22	Murra Bidgee Mullangari Aboriginal Corporation	HR sent Stage 4 project update letter and draft ACHAR	Email
27.4.22	Wiradyuri Traditional Owners Central West Aboriginal Corporation	HR sent Stage 4 project update letter and draft ACHAR	Email
27.4.22	Neville and Region Landcare	HR sent Stage 4 project update letter and draft ACHAR	Email
27.4.22	Wellington Valley Wiradjuri Aboriginal Corporation	HR sent Stage 4 project update letter and draft ACHAR	Email
27.4.22	Gunjeewong Cultural Heritage Aboriginal Corporation	HR sent Stage 4 project update letter and draft ACHAR	Email
27.4.22	Muragadi Heritage Indigenous Corporation	HR sent Stage 4 project update letter and draft ACHAR	Email
27.4.22	Warrabinga	HR sent Stage 4 project update letter and draft ACHAR	Email
27.4.22	Nyree Reynolds	HR sent Stage 4 project update letter and draft ACHAR	Email
12.5.22	Wellington Valley Wiradjuri Aboriginal Corporation	Brad Bliss provided the WVWAC response to the ACHAR	Email
12.5.22	Wellington Valley Wiradjuri Aboriginal Corporation	HR thanked	Email

Appendix Figure 2: Example stage project update letter and draft ACHAR cover letter

OzArk Environment & Heritage ABN 59 104 582 354
Dubbo T: 02 6882 0118 145 Wingewarra St
Queanbeyan enquiry@ozarkehm.com.au PO Box 2069
Newcastle www.ozarkehm.com.au DUBBO NSW 2830

27 April 2022

[redacted]

MCPHILLAMYS GOLD PROJECT
ABORIGINAL CULTURAL HERITAGE ASSESSMENT: ADDENDUM 2

Dear [redacted]

Thank-you for your continued participation as a Registered Aboriginal Party (RAP) and involvement in the McPhillamys Gold Project (the Project).

Background

The Project is located 8 kilometres north-east of Blayney in Central West of New South Wales (NSW). The Project would include the development and operation of an open cut gold mine and supporting infrastructure over a 15-year project life.

Regis Resources Limited (Regis) is seeking a state significant development (SSD) consent under Division 4.7 of Part 4 of the NSW *Environmental Planning and Assessment Act 1979* to develop and operate the Project.

Regis submitted the *McPhillamys Gold Project Environmental Impact Statement* (the EIS) in 2019. In 2020, Regis submitted the *McPhillamys Gold Project Submissions Report* (the Submissions Report) to the NSW Department of Planning and Environment in response to the submissions received on the EIS. The *McPhillamys Gold Project Amendment Report* (the 2020 Amendment Report) was also submitted with the Submissions Report to incorporate project changes proposed in response to the submissions received on the EIS.

OzArk Environment & Heritage (OzArk) was engaged in 2018 to complete an Aboriginal Cultural Heritage Assessment Report (ACHAR) for the water supply pipeline component of the Project to support the EIS. In addition, OzArk prepared an addendum ACHAR for the 2020 Amendment Report.

Since lodgement of the 2020 Amendment Report, Regis has refined the Project design to respond to particular comments regarding the mine site water management system and the outcomes of ongoing consultation with landholders along the water supply pipeline. Regis is therefore preparing a second Amendment Report (the 2022 Amendment Report) to incorporate these changes into the Project.

OzArk Environment & Heritage

The 2022 Amendment Report includes (amongst other changes) a revised alignment of the northern option of the water supply pipeline proposed in the 2020 Amendment Report. OzArk has therefore been engaged to complete an ACHAR Addendum 2 that assesses the potential impacts of the realigned water supply pipeline to support the 2022 Amendment Report.

Aboriginal Cultural Heritage Assessment Addendum 2

The draft ACHAR Addendum 2 is attached to this email or can be downloaded from the following link: Draft_McPhillamys addendum ACHAR_2022.pdf

Please contact OzArk if you wish to request a hard copy of the ACHAR Addendum 2.

In accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (NSW Department of Environment, Climate Change and Water, 2010), we have provided the draft ACHAR Addendum 2 for your review and feedback. Your feedback may include the identification of areas of cultural significance or issues that may be used to affect, inform, or refine the draft ACHAR Addendum 2.

If you wish to provide input on following, please make a submission (via contact details provided at the of this letter) by **5:00pm Thursday 25 May 2022**:

- Identification of issues.
- Any issues of cultural significance, or any Aboriginal objects or places of cultural value within the investigation area, that you are aware of.
- Any protocols or restrictions you may consider necessary in relation to any information of sensitivity that you may provide.
- Any other factors you consider to be relevant to the heritage assessment.

Received comments will be taken into consideration upon finalisation of the ACHAR Addendum 2. Please provide your feedback via the following contact details.

Catherine Burrowes
OzArk Environment & Heritage
catherine@ozarkehm.com.au
02 6882 0118

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.

Kind regards,

Catherine Burrowes
Office Manager/ Community Liaison

Appendix Figure 3: WVWAC response to the draft ACHAR.

WELLINGTON VALLEY WIRADJURI
ABORIGINAL CORPORATION

P.O. Box 1583
Orange NSW 2800
ABN: 77 548 143 187
ICN: 7398
WVWAC@hotmail.com

12th May 2022

Harison Rochford
OzArk Environment & Heritage
P.O. Box 2069
Dubbo NSW 2830

Re: DRAFT McPhillamys Addendum 2 ACHAR Report. Dated: 27 April 2022.

Dear Harrison,

Wellington Valley Wiradjuri Aboriginal Corporation (WVWAC) would like to thank you for your invitation to provide a response for This Aboriginal Cultural Heritage issue relevant to obligations to protect our Heritage within our Traditional Lands. Wellington Valley Wiradjuri represent traditional families with identified apical ancestry pre European occupation with our known Traditional Lands. We know our culture, country and continue with our association with our traditional lands (Ngurangbang).

Wellington Valley Wiradjuri Aboriginal Corporation (WVWAC) have through consultation with other Traditional Elders and Traditional Community with cultural knowledge via direct meetings, telephone and video conferencing have the following comments and or recommendations:

- From a Wiradjuri Society view for our Cultural Material each piece, each site has a High Social or Cultural Value.
- We Cannot speak to the Archaeological Scientific Value, however Anthropologically these artefacts have a Moderate Academic Value in mapping and understanding Social and Cultural use of the varying materials and site locations selected, from being opportunistic to defined by patterns of seasonal and or generational use and compared to the wider landscape and the other known sites within a 50km radius gives us a greater Anthropological View and information to the Clan use of land and their relationships with surrounding Clans.

Section 8.3.1 Intergenerational Equity, pp 44-45.

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 (Commonwealth of Australia, 2002:5).

When assessing likely harm on Aboriginal objects and places, it is important to consider the principles of ecologically sustainable development (ESD), particularly the precautionary principle and the principle of 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 AHIPs), 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 a proposal. Where there is uncertainty, the precautionary principle should also be followed (DECC 2009: 26)".

- The Project Area contains newly identified cultural material and areas of archaeological potential along with previously recorded AHIMS Sites. However, based on the nature of the Project, it is anticipated that impacts to the majority of these sites and areas of potential can be avoided or mitigated to ensure that harm to Aboriginal sites (of both scientific and cultural significance) is minimized, and the cultural values of area are retained while still permitting modern, sustainable land use practices.

- Given the Project Manager has undertaken to avoid the majority of cultural sites and areas of habitat. WVWAC Members and knowledge Holders are of the opinion and agree that the Intergenerational Equity loss and impact to cultural sites will be minimized although the site will be partially harmed.

Section 10 Recommendations, page 49.

- WVWAC Elders, Knowledge Holders and Members agree to the recommendations as written in this section.

WVWAC look forward to further participating in the above project, sharing our knowledge of county and to ensure our Heritage is protected. We trust our response meets your requirements. Please contact WVWAC Directors should you require our assistance to address any Aboriginal issues to support your future plans.

Regards,

Bradley R. Bliss J.P.
WVWAC CEO and Contact Officer
Senior Aboriginal Cultural Heritage Field Officer
Senior Aboriginal Cultural Mentor and Educator
Mobile: 0427321016

APPENDIX 2: AHIMS EXTENSIVE SEARCH

AHIMS Web Services (AWS)
Extensive search - Site list report

Your Ref/PO Number : 3330
Client Service ID : 656615

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
44-2-0118	EP-IF-1;Willow Vale;	AGD	55	731290	6296170	Open site	Valid	Artefact : -	Isolated Find	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd					Permits		
44-2-0012	Evans Plains Creek Dicks Creek	AGD	55	728134	6291957	Open site	Valid	Artefact : -	Open Camp Site	353,1298
	Contact	Recorders	ASRSYS					Permits		
44-3-0043	Mount Aspley - Stone Arrangement	GDA	55	734935	6297964	Open site	Valid	Stone Arrangement : -	Stone Arrangement	353,606,1298
	Contact	Recorders	ASRSYS,Extent Heritage Pty Ltd - Pyrmont - Individual users,Mr.Cameron Neal					Permits		
44-3-0065	Panorama Hills Stone	GDA	55	735200	6295000	Open site	Valid	Stone Arrangement : -	Stone Arrangement	606,1298,1044 15
	Contact	Recorders	ASRSYS,Extent Heritage Pty Ltd - Pyrmont - Individual users,Mr.Cameron Neal					Permits		
44-3-0103	GH3;	AGD	55	734750	6298720	Open site	Valid	Artefact : -	Open Camp Site	2795
	Contact	Recorders	Mr.Matthew Barber					Permits		
44-3-0011	Mt Apsley	AGD	55	734979	6291511	Open site	Valid	Stone Arrangement : -	Stone Arrangement	353,1298
	Contact	Recorders	ASRSYS					Permits		
44-2-0295	Swan Ponds Quarry 2	GDA	55	730097	6294214	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					Permits		
44-2-0296	Swan Ponds Quarry 1	GDA	55	730025	6293879	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Navin Officer Heritage Consultants Pty Ltd,Mrs.Nicola Hayes					Permits		
44-3-0243	MPW-AS3	GDA	55	735109	6296288	Open site	Valid	Artefact : -		104415
	Contact	Recorders	Extent Heritage Pty Ltd - Pyrmont - Individual users,Miss.Coral Hardwick					Permits		
44-5-0175	Evans Plains Creek Tributary IF-01	GDA	55	728678	6289590	Open site	Valid	Artefact : -		104775
	Contact	Recorders	OzArk Environmental and Heritage Management - Dubbo,Doctor.Alyce Cameron					Permits		

** Site Status
Valid - The site has been recorded and accepted onto the system as valid
Destroyed - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.
Partially Destroyed - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground
Not a site - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Report generated by AHIMS Web Service on 04/02/2022 for Yekun Zhang for the following area at Datum :GDA, Zone : 55, Eastings : 725303.0 - 735303.0, Northings : 6288921.0 - 6298921.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 10

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

Page 1 of 1