



# Appendix 9

## Aboriginal Archaeological Impact Assessment and Historic Heritage Impact Assessment

prepared by

Ozark Environment  
and Heritage  
Management Pty Ltd

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View north into the existing Strontian Quarry extraction area.

## **ABORIGINAL ARCHAEOLOGICAL IMPACT ASSESSMENT & HISTORIC HERITAGE IMPACT ASSESSMENT**

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### **STRONTIAN QUARRY**

NARRANDERA, NSW

OCTOBER 2020

Report prepared by  
OzArk Environment & Heritage  
for R.W. Corkery & Co Pty Ltd  
on behalf of Milbrae Quarries Pty Ltd

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### **Acknowledgement**

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

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## ABBREVIATIONS AND GLOSSARY

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AAIA	Aboriginal Archaeological Impact Assessment. An archaeological assessment with the purposes of assessing potential impacts to archaeological sites. Usually conducted using the Code of Practice survey guidelines.
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
Code of Practice	<i>Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales</i> under Part 6 NPW Act. Issued by DECCW (now Heritage NSW) in 2010, the Code of Practice is a set of guidelines that allows limited test excavation without the need to apply for an AHIP.
DPIE	NSW Department of Planning, Industry and Environment
EIS	Environmental Impact Statement. A required document for major projects documenting all potential impacts to the environment, including heritage, that may arise due to the development.
Heritage NSW	Government department tasked with ensuring compliance with the NPW Act. Formerly known as the Office of the Environment and Heritage (OEH) or the Biodiversity and Conservation Division (BCD)
HHIA	Historic Heritage Impact Assessment. An archaeological assessment with the purposes of assessing potential impacts to historic archaeological sites.
NPW Act	<i>National Parks and Wildlife Act 1974</i> . Primary legislation governing Aboriginal cultural heritage within NSW.
PAD	Potential archaeological deposit. Indicates that a particular location has potential to contain subsurface archaeological deposits, although no Aboriginal objects are visible.
SEARs	Secretary's Environmental Assessment Requirements issued by the NSW Department of Planning, Industry and Environment.

## EXECUTIVE SUMMARY

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OzArk Environment & Heritage (OzArk) has been engaged by R.W. Corkery & Co Pty Limited (RWC), on behalf of Milbrae Quarries Pty Ltd (the Applicant) to complete an Aboriginal Archaeological Impact Assessment (AAIA) and Historic Heritage Impact Assessment (HHIA) for Strontian Quarry which has the potential to be impacted by the continued operation and extension of the Quarry (the Proposal). The survey area covers approximately 12 hectares (ha) within the 15 ha Quarry Site.

The fieldwork component of this assessment was undertaken by OzArk Senior Archaeologist, Dr Alyce Cameron, on Tuesday 17 September 2019. A site officer from the Narrandera Local Aboriginal Land Council (LALC) participated in the survey. The entirety of the survey area was assessed by pedestrian transects, excluding the area of the existing extraction area and associated tracks, as these have already been heavily disturbed and modified. All mature, native trees within the survey area and with the potential to contain Aboriginal scarring were inspected. No Aboriginal sites, sensitive landforms or potential archaeological deposits were recorded during the survey.

Two historic items were recorded: Strontian HS-01, a survey blaze tree; and Strontian HS-02, a survey trigonometric station.

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

1. The proposed work may proceed at Strontian Quarry without further archaeological investigation under the following conditions:
  - a) All land and ground disturbance activities must be confined to within the archaeological survey area, as this will eliminate the risk of harm to Aboriginal objects in adjacent landforms. Should the parameters of the Proposal extend beyond the assessed areas, then further archaeological assessment may be required.
  - b) All staff and contractors involved in the proposed work should be made aware of the legislative protection requirements for all Aboriginal sites and objects.
2. This assessment has concluded that there is a low likelihood that the proposed work will adversely harm Aboriginal cultural heritage sites. However, if Aboriginal objects are identified during the construction and operation of the Proposal, all work should cease and the procedures in the *Unanticipated Finds Protocol* (**Appendix 3**) should be followed.



3. In the event of skeletal remains being identified during the construction and operation of the Proposal, the *Unanticipated Skeletal Remains Protocol* (**Appendix 4**) should be followed.
4. Work crews should undergo cultural heritage induction to ensure they recognise Aboriginal artefacts (see **Appendix 5**) and are aware of the legislative protection of Aboriginal objects under the *National Parks and Wildlife Act 1974* and the contents of the *Unanticipated Finds Protocol*.
5. Two historical features were recorded, a survey blaze tree and a trigonometric station. Both are assessed as having 'nil' heritage values (**Table 6-1**). However, Section 24(1) of the *Surveying and Spatial Information Act 2002* states that a person must not remove, damage, destroy, displace, obliterate or deface any survey mark unless authorised to do so by the Surveyor General (see **Section 6.3.2** for further details).
6. In the unlikely event that historical relics or deposits are unearthed during the proposed works, the *Historical Heritage Unanticipated Finds Protocol* (**Appendix 6**) should be followed.

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## **1 INTRODUCTION**

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

OzArk Environment & Heritage (OzArk) has been engaged by R.W. Corkery & Co Pty Limited (RWC), on behalf of Milbrae Quarries (the Applicant) to complete an Aboriginal Archaeological Impact Assessment (AAIA) and Historic Heritage Impact Assessment (HHIA) of Strontian Quarry (the Quarry Site) which has the potential to be impacted by the continued operation and extension of the Quarry (the Proposal). The Proposal is in the Narrandera Local Government Area (LGA) (**Figure 1-1**).

### **1.2 BACKGROUND**

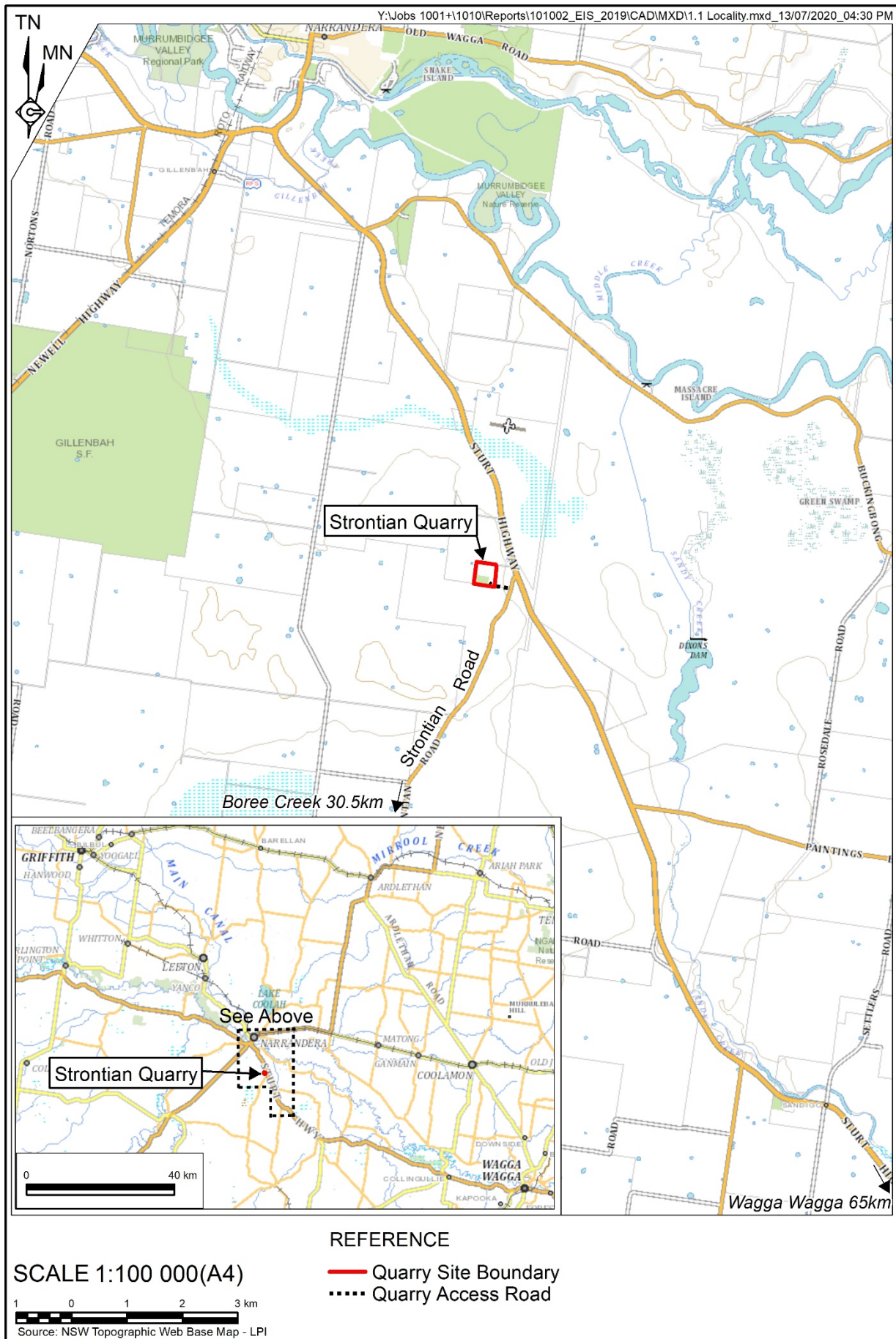
There have been two previous heritage assessments of the study area.

In 1999, Roland Williams from the Wiradjuri Branch of the New South Wales Aboriginal Land Council conducted an inspection of Strontian Quarry and concluded that it had been heavily disturbed by previous quarrying and there are no Aboriginal sites in the proposed 1999 development area. A copy of this letter is provided as **Appendix 7**.

A Statement of Environmental Effects (SEE) was produced for the study area by Planningmatters Development Services in 2011. Heritage was addressed minimally in the SEE, which concluded there was a low likelihood of Aboriginal objects as the Proposal did not relate to removal of material from an old riverbed or deposit.

In 2017, OzArk conducted a due diligence archaeological assessment for Planningmatters Development Services. This assessment was for the existing quarry at Lot 133 and Lot 134 DP726537 and the land adjacent in Lot 105 DP754552. The area assessed for the due diligence is larger than the current study area. A visual inspection was conducted as part of the assessment and no Aboriginal sites were recorded. The assessment concluded that it was unlikely for Aboriginal objects to be present inside the assessed area.

Figure 1-1: Map showing the location of the Quarry Site.



### **1.3 PROPOSED WORK**

This Proposal is for the extension of operations at Strontian Quarry which is currently operating under Development Consent DA27/2011/12 issued by Narrandera Shire Council on 27 March 2012. The quarry is approved to extract 30,000 tonnes per annum (tpa) of indurated sandstone material and disturb a total area of no more than two hectares (ha). The proposed works include extending the currently operating quarry which would increase the total area of disturbance to approximately 7.6 ha.

In addition to the proposed extension of the extraction area, the proponent proposes to increase the maximum extraction rate by 95 000 tpa (from 30 000 tpa to 125 000 tpa). In order to accommodate this proposed increase to the extraction rate at the Quarry Site, Milbrae Quarries proposes to increase the number of laden truck movements from five per day to a maximum of 48 per day. It is noted that the proposed transport routes would remain consistent with existing approved transport routes. The Proposal would also include the importation of up to 1500 tpa of concrete and other building materials for recycling. The proposed areas for impact at the quarry are shown on **Figure 1-2**.

### **1.4 STUDY AREA**

The study area includes the entire Quarry Site (15 ha) while the survey area covers approximately 12 ha and excludes the remnant vegetation in the northeast corner and part of the east boundary of the quarry. **Figure 1-3** shows the survey area in relation to the existing quarry and surrounds. The quarry boundary is bounded to the east by agricultural paddocks. To the north, south and west of the survey area is remnant vegetated slopes, likely used for grazing.



Figure 1-2: Proposed work showing impact footprint.

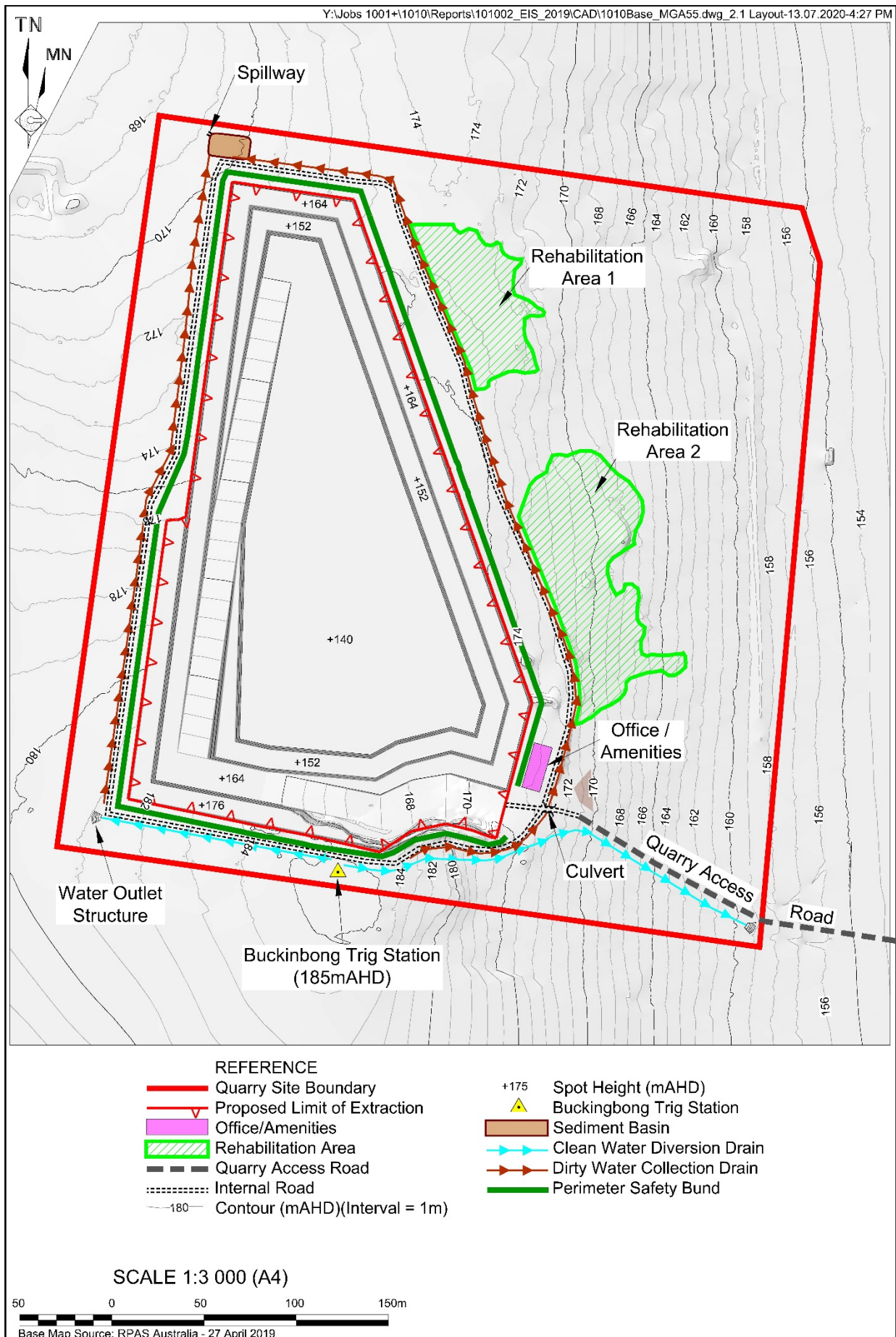
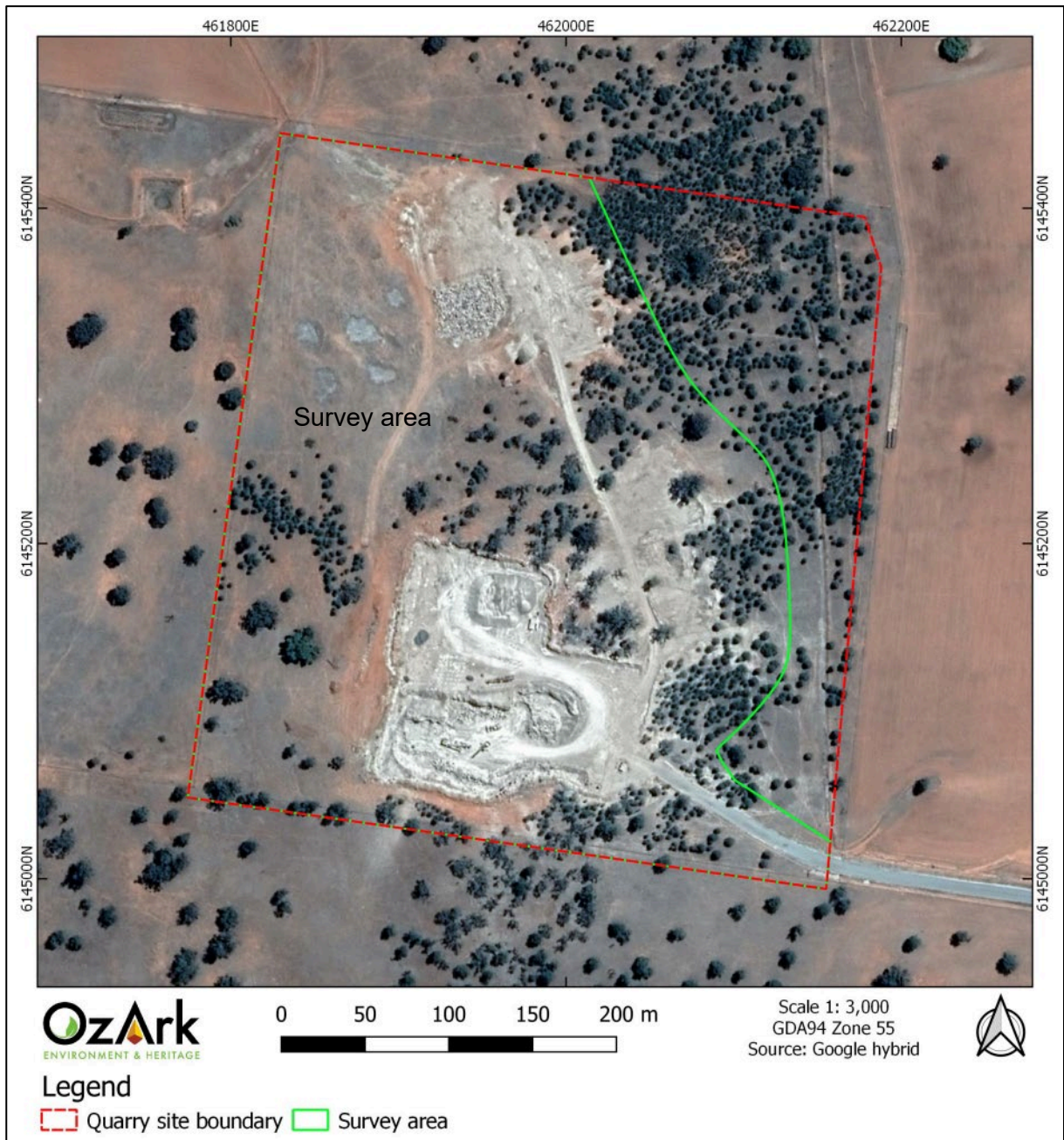


Figure 1-3: Aerial showing the survey area.



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## 2 THE ARCHAEOLOGICAL ASSESSMENT

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### 2.1 DATE OF ARCHAEOLOGICAL ASSESSMENT

The fieldwork component of this assessment was undertaken by OzArk on Tuesday 17 September 2019.

### 2.2 OZARK INVOLVEMENT

#### 2.2.1 Field assessment

The fieldwork component of the heritage assessment was undertaken by:

- Fieldwork Director: Dr Alyce Cameron (OzArk Senior Archaeologist, BA [Hons] and PhD [Archaeology & palaeoanthropology] Australian National University)

#### 2.2.2 Reporting

The reporting component of the heritage assessment was undertaken by:

- Author: Dr Alyce Cameron
- Reviewer: Ben Churcher (OzArk Principal Archaeologist; BA [Hons], Dip Ed).

### 2.3 RELEVANT LEGISLATION

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

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

#### 2.3.1 State legislation

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

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

- Part 4: Local government development assessments, including heritage. May include schedules of heritage items
  - Division 4.7: Approvals process for state significant development

- Part 5: Environmental impact assessment on any heritage items which may be impacted by activities undertaken by a state government authority or a local government acting as a self-determining authority
  - Division 5.2: Approvals process for state significant infrastructure.

### ***National Parks and Wildlife Act 1974*** (NPW Act)

Amended during 2010, the NPW Act provides for the protection of Aboriginal objects (sites, objects and cultural material) and Aboriginal places. Under the Act (Part 6), an Aboriginal object is defined as: any deposit, object or material evidence (not being a handicraft for sale) relating to indigenous and non-European habitation of the area that comprises NSW, being habitation both prior to and concurrent with the occupation of that area by persons of European extraction, and includes Aboriginal remains.

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

As of 1 October 2010, it is an offence under Section 86 of the NPW Act to 'harm or desecrate an object the person knows is an Aboriginal object'. It is also a strict liability offence to 'harm an Aboriginal object' or to 'harm or desecrate an Aboriginal place', whether knowingly or unknowingly. Section 87 of the Act provides a series of defences against the offences listed in Section 86, such as:

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

Under Section 89A of the Act, it is a requirement to notify the Secretary of the Department of Premier and Cabinet 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 the Department of Premier and Cabinet (DPC).

### **2.3.2 Commonwealth legislation**

#### ***Environment Protection and Biodiversity Conservation Act 1999*** (EPBC Act)

The EPBC Act, administered by the commonwealth Department of Agriculture, Water and the Environment, provides a framework to protect nationally significant flora, fauna, ecological communities and heritage places. The EPBC Act establishes both a National Heritage List and Commonwealth Heritage List of protected places. These lists may include Aboriginal cultural sites

or sites in which Aboriginal people have interests. The assessment and permitting processes of the EPBC Act are triggered when a proposed activity or development could potentially have an impact on one of the matters of national environment significance listed by the Act. Ministerial approval is required under the EPBC Act for proposals involving significant impacts to national/commonwealth heritage places.

### **Other**

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.

The *Protection of Movable Cultural Heritage Act 1986* includes legislation that prevents objects of cultural heritage significance, such as those that are sacred to Aboriginal peoples' heritage, from being exported out of Australia.

### **2.3.3 Applicability to the Proposal**

The current Proposal will be assessed under Part 4 of the EP&A Act.

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

The development application will be accompanied by an *Environmental Impact Statement* (EIS) as the Proposal is classified as "Designated Development" given it is categorised as "Extractive Industries", under Schedule 3, Part 1(19) of the *Environmental Planning & Assessment Regulation 2000* (EP&A Reg).

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.

## **2.4 ASSESSMENT APPROACH**

This AAIA and HHIA has been prepared following the appropriate guidelines, policies, and industry requirements:

- *Code of Practice for the Investigation of Aboriginal Objects in New South Wales* (Code of Practice; DECCW 2010).
- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (the Guide; OEH 2011).
- *Historical Archaeology Code of Practice* (Heritage Council 2006).
- *Assessing Heritage Significance* (Heritage Office 2001).

This assessment has been prepared in accordance with DPIE's (then the Department of Planning and Environment) Secretary's Environmental Assessment Requirements (SEARs) for the project,

issued on 17 July 2019. The SEARs identify matters which must be addressed in the EIS and essentially form its terms of reference. **Table 1-1** lists individual requirements relevant to this Aboriginal cultural heritage and historic heritage impact assessment and where they are addressed in this report.

**Table 1-1: Technical assessment (heritage) related SEARs.**

Requirement	Section addressed
An assessment of the potential impacts on Aboriginal heritage (cultural and archaeological), including evidence of appropriate consultation with relevant Aboriginal communities/parties and documentation of the views of these stakeholders regarding the likely impact of the development on their cultural heritage	<b>Section 2 to Section 6</b>
Identification of Historic heritage in the vicinity of the development and an assessment of the likelihood and significance of impacts on heritage items, having regard to the relevant policies and guidelines listed in Attachment 1	<b>Section 5 and Section 6</b>

To inform the preparation of the SEARs, DPIE invited other government agencies to recommend matters to be address in the EIS. These matters were considered by the Secretary for DPIE when preparing the SEARs. Copies of the government agencies' advice to DPIE were attached to the SEARs.

Heritage Council of New South Wales and Heritage NSW (then the Office of Environment and Heritage) raised matters relevant to the Aboriginal cultural heritage assessment. The matters raised concerning Aboriginal cultural heritage are listed in **Table 1-2** and have been considered in preparing this assessment, as indicated in the table. No agency specific assessment recommendations regarding historic heritage were provided.

**Table 1-2: Agency project specific assessment recommendations.**

Requirement	Section addressed
<b>Aboriginal cultural heritage</b>	
We recommend that the proposed activity area be subject to a detailed Aboriginal cultural heritage assessment in accordance with the <i>Guide to Investigation, Assessing and Reporting on Aboriginal Cultural Heritage in NSW</i> and <i>Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW (IDEECW 2010)</i> .	<b>Section 5</b>
The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the proposal. This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the <i>Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH 2010)</i> , and should be guided by the <i>Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW 2011)</i> and consultation with OEH regional branch officers. The Due Diligence process is not appropriate to use as an assessment here.	<b>Section 2 to Section 6</b>
Where Aboriginal cultural heritage values are identified, consultation with Aboriginal people must be undertaken and documented in accordance with the <i>Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW)</i> . The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the EIS.	Not relevant. No Aboriginal cultural heritage values were identified in association with the study area.
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.	<b>Section 6</b>

Requirement	Section addressed
The assessment of cultural heritage values must include a surface survey undertaken by a qualified archaeologist in areas with potential for subsurface Aboriginal deposits. The result of the surface survey is to inform the need for targeted test excavation to better assess the integrity, extent, distribution, nature and overall significance of the archaeological record. The results of surface surveys and test excavations are to be documented in the EIS.	<b>Section 5</b>
Where harm to an Aboriginal object or declared Aboriginal place cannot be avoided, an Aboriginal Heritage Impact Permit (AHIP) will be required from OEH under the National Parks and Wildlife Act 1974. You must apply to OEH for an AHIP prior to commencing works that will directly or indirectly harm an Aboriginal object or a declared Aboriginal place	Not relevant. No Aboriginal cultural heritage was identified within the study area.
The EIS must outline procedures to be followed in the event Aboriginal burials or skeletal material is uncovered during construction to formulate appropriate measures to manage the impacts to this material.	<b>Appendix 4</b>
The EIS must outline procedures to be followed if Aboriginal objects are found at any stage of the life of the development to formulate appropriate measures to manage unforeseen impacts.	<b>Appendix 3</b>

## 2.5 PURPOSE AND OBJECTIVES

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

### 2.5.1 Aboriginal archaeological assessment objectives

The current assessment will apply the Code of Practice in the completion of an Aboriginal archaeological 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 objects or sites of Aboriginal heritage significance within the study area, as well as any landforms likely to contain further archaeological deposits

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

## 2.6 ABORIGINAL COMMUNITY INVOLVEMENT

One site officer, Mr Derick Lyons, from the Narrandera Local Aboriginal Land Council (LALC) accompanied the OzArk archaeologist during the pedestrian survey. See **Appendix 1** for a log and copy of all correspondence with the Aboriginal Community.

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### 3 LANDSCAPE CONTEXT

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An understanding of the environmental contexts 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 humanly activated landscape processes, influence the degree to which these material culture remains are retained in the landscape as archaeological sites; and the degree to which they are preserved, revealed and/or conserved in present environmental settings.

The study area is situated within the South Western Slopes Bioregion which covers an extensive area of foothills and isolated ranges comprising the lower inland slopes of the Great Dividing Range. Parts of the Murray, Murrumbidgee, Lachlan and Macquarie River catchments exist within the bioregion (NPWS 2003).

#### 3.1 TOPOGRAPHY

The eastern portion of the study area is situated within the Murrumbidgee–Tarcutta Channels and Floodplains landscape (Mitchell 2002: 95) which includes channels, floodplains and terraces of Murrumbidgee tributaries on Quaternary alluvium, generally with an elevation ranging from 200 to 400 metres (m), and a local relief of 25 m.

The portion of the study area to the west is situated within the Cocoparra Ranges and Foothills landscape (Mitchell 2002: 36) which includes steep crested ranges, ridges, hills and associated foothills of Quaternary colluvium with outcrops of upper Devonian sandstone, conglomerate and siltstones. Cliff faces of up to 30 m can often be found on boulder hill slopes that have an overall relief to 260 m. Local geology in this landscape type is often characterised by extensive rock outcrop.

The study area is located at the top of a small hill. The western section of the study area has a slight decline to the northwest, while the eastern section of the study area has a slightly steeper decline towards the Sturt Highway and Strontian Road. The landforms present within the study area include: elevated flats and top of slope, and slopes (see **Figure 3-1**). There is also previously disturbed area which is exempt from landform classification due to the high level of modification (i.e. the existing extraction area and area of operational disturbance) which is shown in **Figure 3-2**.

#### 3.2 GEOLOGY AND SOILS

A wide range of rock types are found across the bioregion, which is affected by the topographic and rainfall gradients that decrease towards the west (NPWS 2003). Soils of the Murrumbidgee–



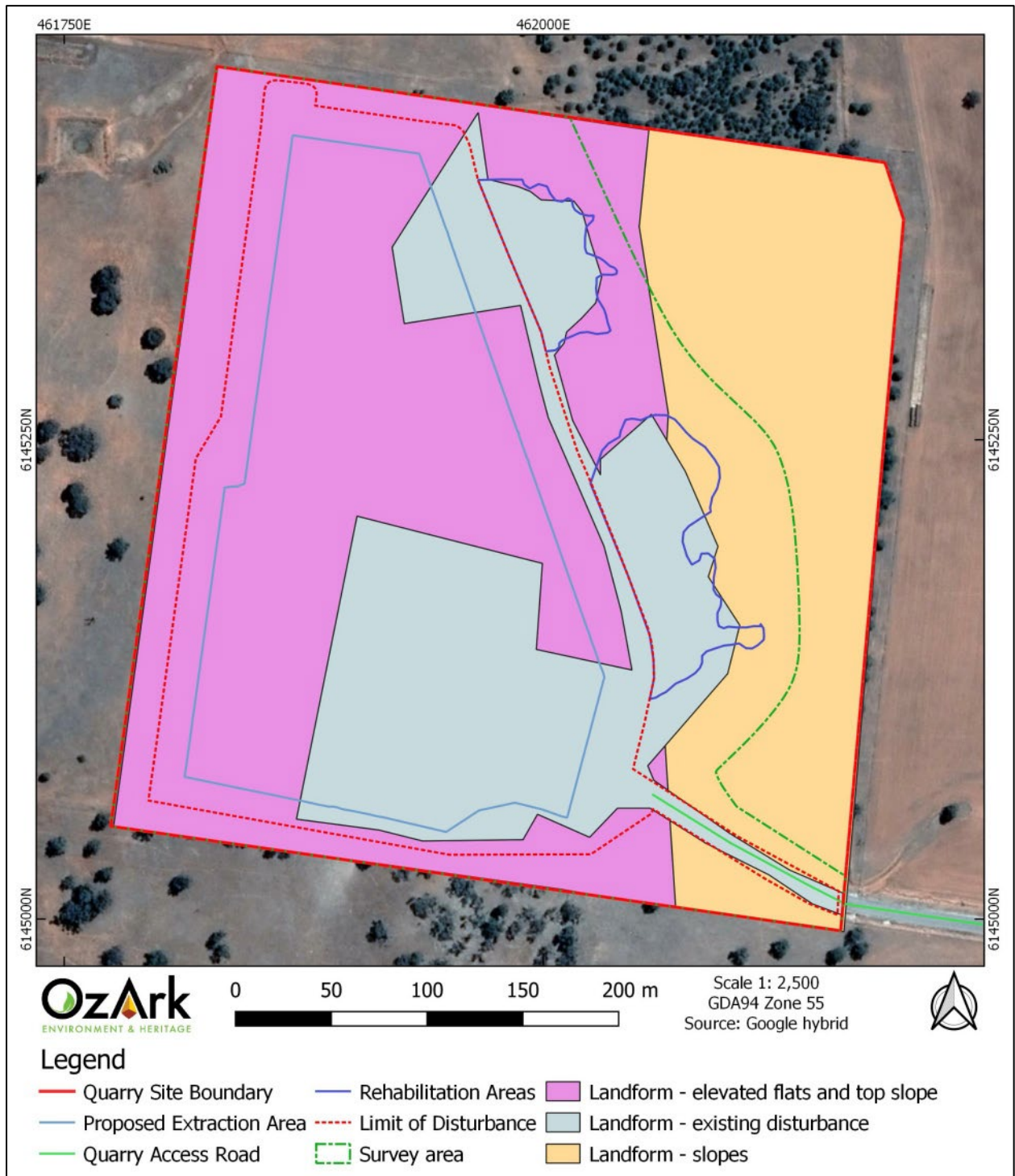
Tarcutta Channels and Floodplains are characterised by undifferentiated organic sand and loam in the floodplain, with brown gradational loam and yellow texture-contrast soils on higher terraces.

The soils of the Cocoparra Ranges and Footslopes are represented by shallow sandy lithosols, acid neutral and calcareous red earths which are commonly identified on sloped landforms. Deep sandy alluviums are generally associated within creek lines.

**Figure 3-1: Topography of the study area.**



Figure 3-2: Landforms within the study area.



### 3.3 HYDROLOGY

No permanent water sources transect the study area. The closest permanent water body is the Murrumbidgee River approximately 4.5 kilometres (km) to the northeast, including associated tributaries and formed channels. Sandy Creek, a tributary of the Murrumbidgee, is situated approximately 4.2 km to the east. A number of irrigation channels and inundation land surround the study area to the north. However, the channels are not classified as a natural recognised water source.

### **3.4 VEGETATION**

The vegetation of the study area and adjacent environs has changed significantly since colonial settlement and the establishment of agriculture, cultivation and irrigation systems. Therefore, the vegetation types observed today are limited in terms of what vegetation was present at the time of Aboriginal occupation.

The Murrumbidgee–Tarcutta Channels and Floodplains landscape, in the past, would have been predominantly of *Eucalyptus* species. The local Aboriginal communities would have had a vegetation community of river red gum corridor woodlands on waterway banks, and yellow box and grey box open woodland on floodplains and terraces (Mitchell 2002: 95).

Within the Cocoparra Ranges and Footslopes landscape, past Aboriginal communities would likely have encountered the following vegetation on the surrounding ranges: white cypress pine, currawong, Dwyer's Mallee gum, and red ironbark; broom bush, hill tea-tree, urn heath, wedge-leaf hopbush, punty bush, cough bush, sugar wood, grey box, Wilga, and Deane's wattle. Understorey vegetation is often characterised by rock fern, wire grass, mulga grass, and other short grasses and forbs. Common on lower slopes are bimbale box, white cypress pine, mallees, yarran, Wilga, emu bush and various acacia, grasses and forbs (Mitchell 2002: 36).

### **3.5 CLIMATE**

Temperatures at the Quarry Site range from a mean maximum temperature between 13.9°C and 32.8°C while the mean minimum temperature is between 3.2°C and 17.1°C. The mean annual rainfall is 439 millimetres (mm). Mean monthly rainfall varies between a maximum of 46.0 mm in June and a minimum of 29.7 mm in February (RWC 2020).

Rainfall is typically infrequent with more rain days experienced during winter months. Rainfall can be variable, with infrequent, high intensity rainfall events occurring throughout the year with rainfall received generally being equivalent to between approximately one to three times the average monthly rainfall (RWC 2020).

### **3.6 LAND USE HISTORY AND EXISTING LEVELS OF DISTURBANCE**

Since colonial settlement in the region, Narrandera and the greater portions of land adjacent to the Murrumbidgee River and associated tributaries has been subject to a diverse land use history that has resulted in native vegetation clearing, cultivated and irrigated pastures, and quarrying.

Much of the study area comprises previously cleared land and an existing quarry with associated infrastructure and access, which has consequently undergone ground surface disturbances. These activities would have likely removed any potential evidence of Aboriginal cultural heritage.

### **3.7 CONCLUSION**

Review of the landscape context suggests that Aboriginal occupation of the study area and vicinity was likely to have occurred, though would have varied with the availability of local resources. Mature, native tree species common to the area would have provided a resource for Aboriginal people in the past. The topography of the surrounding landforms to the study area would have allowed ample elevation to support sporadic occupation, transitory movement, and as a vantage point across the landscape. The lack of a reliable water source in the vicinity of the study area would indicate that no repeated, long-term occupation of the study area would have occurred. Resources suitable to support a large population of people would have been more readily available closer to permanent water sources, such as along the Murrumbidgee River, that are lacking in the vicinity of the study area.

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## 4 ABORIGINAL ARCHAEOLOGY BACKGROUND

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### 4.1 ETHNO-HISTORIC SOURCES OF REGIONAL ABORIGINAL CULTURE

The study area is within the southern boundaries of the territory of the Wiradjuri tribal and linguistic group (Tindale 1974). 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 Quarry Site is located in the riverine plains and in the western area of the Wiradjuri tribal areas. It is important to recognise the use and meaning of the term 'tribe' and the designation of lines on a map as 'tribal boundaries' as being controversial issues (Bowdler 1983: 22).

Prior to colonial settlement, the Murrumbidgee River corridor, would have supported woodland and forest habitats that provided home to a wide range of exploitable resources for the Aboriginal population. These resources included possums, which provided a ready source of meat and fur for cloaks (Kabaila 1998: 12). Also used were vegetables including the roots of daisy yams (Myrrnong), the tubers of lilies and orchids, stands of bracken fern, and Kurrajong roots.

As the Murrumbidgee River enters the western slopes of the Wagga Wagga area, and out onto the red brown earth plains around Hay and Griffith, the landscape becomes more an open plain woodland becoming increasingly arid with the western flow of the river. The grassland plains were characterised by kangaroos and emus that were hunted, often using the firing of vegetation as a tool either to flush out game or to provide green pick to attract animals (Kabaila 1998: 12). The frequent floods of the Murrumbidgee River provided the local Aboriginal population with an abundance of resources: as the flood waters receded, they left the drying pools stocked with freshwater mussels, yabbies, fish and waterfowl as well as aquatic plants (Kabaila 1998: 12).

### 4.2 REGIONAL ARCHAEOLOGICAL CONTEXT

Within the Wiradjuri region, the presence of Aboriginal people has been dated to 40,000 years ago in the Darling Basin (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.

Systematic, regional based archaeological studies have not been undertaken in this area. Additionally, most development-driven studies in the broader region have been centred on the Wagga Wagga area. However, some development-driven studies have been undertaken in the region of the study area and provide a useful context for the study area and help inform the predictive model (**Section 4.4**). The following is a summary of the more substantial and relevant of these studies.

In 1983, Hiscock recorded 13 isolated finds and nine scarred trees during a survey of the eastern portion of a proposed transmission line between Wagga Wagga and Darlington Point (Hiscock

1983). Hiscock, after surveying the Wagga Wagga to Darlington Point 330kV transmission line, agreed with Witter (1980) that:

- Mounds, occupation debris of worked stone and scarred cypress pine may be located adjacent to major flood channels
- Scarred trees, fired clay hearths and occupation debris of worked stone, particularly where sand features are present, may be located adjacent to minor flood channels and temporary swamps
- Rare isolated artefacts, flaked or abraded stone and scarred trees can be found through the plains.

OzArk (2013) undertook an archaeological survey for an upgrade to the Darlington Point levee and extension at Darlington Point, located along the lower reaches of the Murrumbidgee River. The area assessed comprised an approximately 5.8 km levee bank surrounding the township of Darlington Point. Three Aboriginal scarred tree sites were recorded in the vicinity of the levee and bank of the Murrumbidgee River. All three trees were considered to be in good condition. Two were Black Box and the other was a River Red Gum. All three trees were located close to the Murrumbidgee River and associated creek lines.

In 2014, OzArk undertook a survey of a transmission line between Yanco and Uranquinty (OzArk 2014). No sites were recorded during the survey, but five sites were recorded on AHIMS within 1 km of the study area. This included three scarred tree sites, a scarred tree / stone artefact site and a quarry / stone artefact site.

OzArk (2015) undertook a survey for the proposed Euroley Poultry Production Complex. This project is approximately 28.5 km northwest of the current study area. During the assessments, six Aboriginal heritage sites were recorded consisting of five scarred trees (AHIMS #49-5-0113, #49-5-0114, #49-5-0122, #49-5-0123 and #49-5-0124) and one hearth (AHIMS #49-5-0112).

NGH Environmental (2017) conducted an assessment for the Avonlie Solar Farm, located approximately 7.3 km south of the study area. During the survey four artefact scatters, 64 isolated finds and one scarred street were recorded. In addition to the sites recorded by NGH Environmental, an Aboriginal community member who accompanied the survey also recorded nine modified trees, 11 artefact sites (scatters and isolated finds not differentiated between) and one Aboriginal ceremony and Dreaming site. The assessment concluded that based on the land use history (intensive agricultural cropping), the landscape, soil, level of disturbance and results of field survey, there was little potential for the presence of intact subsurface deposits within the Proposal area.

A survey was undertaken by OzArk (2018) for the Yarrabee Solar Farm, approximately 28 km west of the study area. During the assessment 25 Aboriginal sites were recorded consisting of 13 artefact scatters, one earthen mound, nine isolated finds and two scarred trees. A further 22

sites were registered by an Aboriginal community member who accompanied the survey which were not archaeological in nature. The majority of sites recorded during the survey were located on sandy dune formations within the study area.

### 4.3 LOCAL ARCHAEOLOGICAL CONTEXT

#### 4.3.1 Desktop database searches conducted

A desktop search was conducted on the following databases to identify any potential previously-recorded heritage within the study area. The results of this search are summarised in **Table 4-1** and presented in detail in **Appendix 2**.

**Table 4-1: Aboriginal cultural heritage: desktop-database search results.**

Name of Database Searched	Date of Search	Type of Search	Comment
Commonwealth Heritage Listings	09/09/2019	Narrandera LGA	No places listed on either the National or Commonwealth heritage lists are located within the study area
State heritage listings	09/09/2019	NSW	No places within 5 km of the study area.
National Native Title Claims Search	09/09/2019	NSW	No Native Title Claims cover the study area.
AHIMS	30/08/2019	10 km centred on the study area	105 sites within 10 km of study area. None inside the study area.
AHIMS	07/08/2020	8 km centred on the study area	18 sites within 8 km of study area. None inside the study area and none have been newly recorded since August 2019.
Local Environmental Plan (LEP)	09/09/2019	Narrandera LEP of 2014	None of the Aboriginal places noted occur near the study area. No historical LEP listings occur within 5 km of study area.

A search of the Aboriginal Heritage Information Management System (AHIMS) on 30 August 2019 database returned 105 records for Aboriginal heritage sites within the designated search area. An updated search of AHIMS was conducted on 7 August 2020 and returned 18 records within the designated 8 km search area. There have been no newly recorded sites within an 8 km radius of the study area since August 2019.

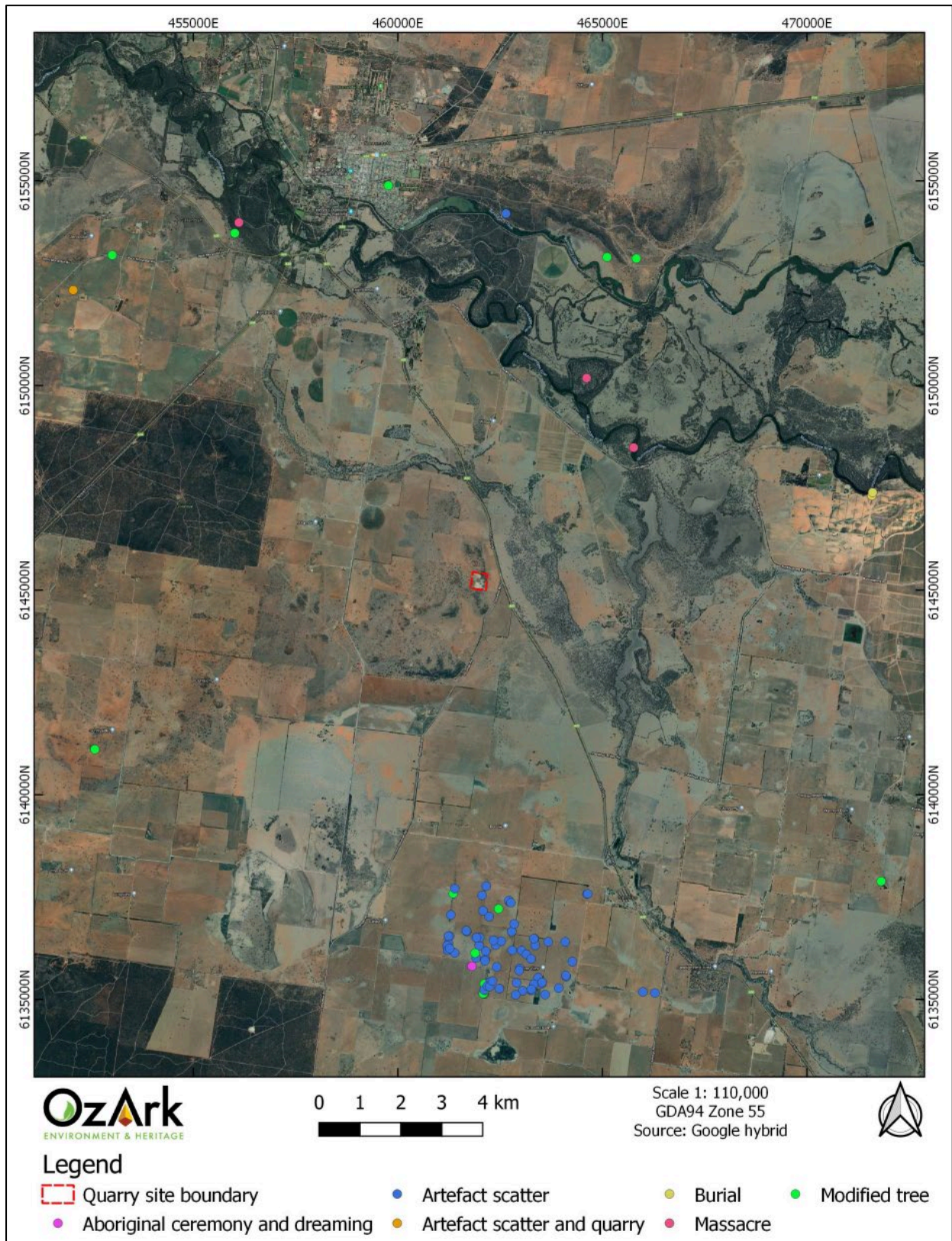
Of the 105 sites within 10 km of the study area, four of the artefact scatter / isolated find recordings are duplicates. As such, there are 101 sites recorded within 10 km of the study area. **Figure 4-1** shows the location of the AHIMS sites that have been recorded near the study area. Artefact scatters or isolated finds are the most frequent site type (75%), followed by modified trees (16%) (**Table 4-2**). The majority of the sites (n=86) were recorded during the NGH Environmental assessment (2017) for Avonlie Solar Farm (see **Section 4.2**).

**Table 4-2: Site types and frequencies of AHIMS sites near the study area.**

<b>Site Type</b>	<b>Number</b>	<b>% Frequency</b>
Artefact scatter or isolated find	76	75
Modified tree	16	16
Conflict &/or massacre	3	3
Burial	2	2
Aboriginal ceremony and dreaming	1	1
Artefact scatter & modified tree	1	1
Artefact scatter & stone quarry	1	1
Restricted site	1	1
<b>Total</b>	<b>101</b>	<b>100</b>



Figure 4-1: Location of previously recorded AHIMS sites in relation to the study area.



## 4.4 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.

### 4.4.1 Settlement strategies

The archaeological studies undertaken within the vicinity of the study area provides information to obtain an 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. As mentioned in **Section 3.3** the closest natural waterway is an unnamed tributary of the Murrumbidgee River 2 km north of the study area and Sandy Creek 3 km east. The topography of the surrounding landforms to the study area would have allowed ample elevation to support sporadic occupation, transitory movement and as a vantage point across the landscape. The lack of a reliable water source in the vicinity of the study area would indicate that no repeated, long-term occupation of the study area would have occurred.

### 4.4.2 Past land use

Crucial for the preservation of archaeological deposits is the history of past land use in an area. The disturbances caused by indurated sandstone extraction are extensive across the study area and include the creation of dirt roads suitable for heavy vehicles. The remainder of the study area

is classified as grazing native vegetation. Much of this vegetation consists of revegetated trees and grasses, as the area appears to have been previously cleared and there are only a few mature native trees remaining, mostly in the western half of the study area.

#### 4.4.3 Previously recorded sites

The results of past archaeological investigations near the study area indicates that the most common site type will be artefact scatters and isolated finds. As mentioned in **Section 4.4.2**, due to past land clearing there is a lack of mature native vegetation in the study area. Regarding artefact scatters and isolated finds, the study area is some distance from a permanent or semi-permanent source of water, and this indicates that any site recording will have a low artefact density and a low complexity of tool types.

#### 4.4.4 Landform modelling

A consideration of the landforms within the study area enables a prediction regarding the type and distribution of sites to be made. Artefact scatters are most likely within the elevated flat area in the western half of the study area. Modified trees are possible in any of the landforms if there are suitable mature native trees in the area.

#### 4.4.5 Previous studies

Previous archaeological studies indicate that modified trees, artefact scatters and isolated finds are the most likely site types to be recorded in the study area. The sites recorded during the NGH Environmental assessment (2017) are significantly closer to Sandy Creek, as well as there being a non-perennial water source to the west of this area. The other sites recorded nearby also tend to be located next to a permanent or semi-permanent source of water which is lacking in the current study area.

#### 4.4.6 Conclusion

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

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

- As most of the study area is distant to permanent water, this site type is not predicted to be common. Additionally, the activities from vegetation and land clearing, stock grazing, fencing and the existing quarry, will likely have displaced artefact scatters, should they have been present. Prior to disturbances in the area, it is considered that this artefact site type would have been identified with artefact scatters more likely to the north and east of the study area closer to the resources of the Murrumbidgee River and Sandy Creek.
- 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.
  - The partial clearance of native vegetation from within the study area indicates that the occurrence of this site type has been reduced. However, the pockets of existing vegetation may reveal such site type, which will also depend on the degree of previous disturbances.

- Quarry sites and stone procurement 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.
  - This site type could be recorded within the study area should suitable rock outcroppings be available.
- An Aboriginal conflict site type has been identified in the AHIMS search and is situated close to the Murrumbidgee River. This site type may occur anywhere in the landscape, however, often such sites would be associated with higher density of human activity, which generally is occupied closer to essential resources.
  - This site type is predicted to be unlikely in the study area given the absence of dominant landform features and/or known occupation areas.
- Burials are generally found in soft sediments such as aeolian sand, alluvial silts and rock shelter deposits. In valley floor and plains contexts, burials may occur in locally elevated topographies rather than poorly drained sedimentary contexts. Burials are also known to have occurred on rocky hilltops in some limited areas. Burials are generally only visible where there has been some disturbance of sub-surface sediments or where some erosional process has exposed them.
  - 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.

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## 5 RESULTS OF ARCHAEOLOGICAL ASSESSMENT

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### 5.1 SAMPLING STRATEGY AND FIELD METHODS

Standard archaeological field survey and recording methods were employed in this study (Burke & Smith 2004). The pedestrian survey followed the Code of Practice.

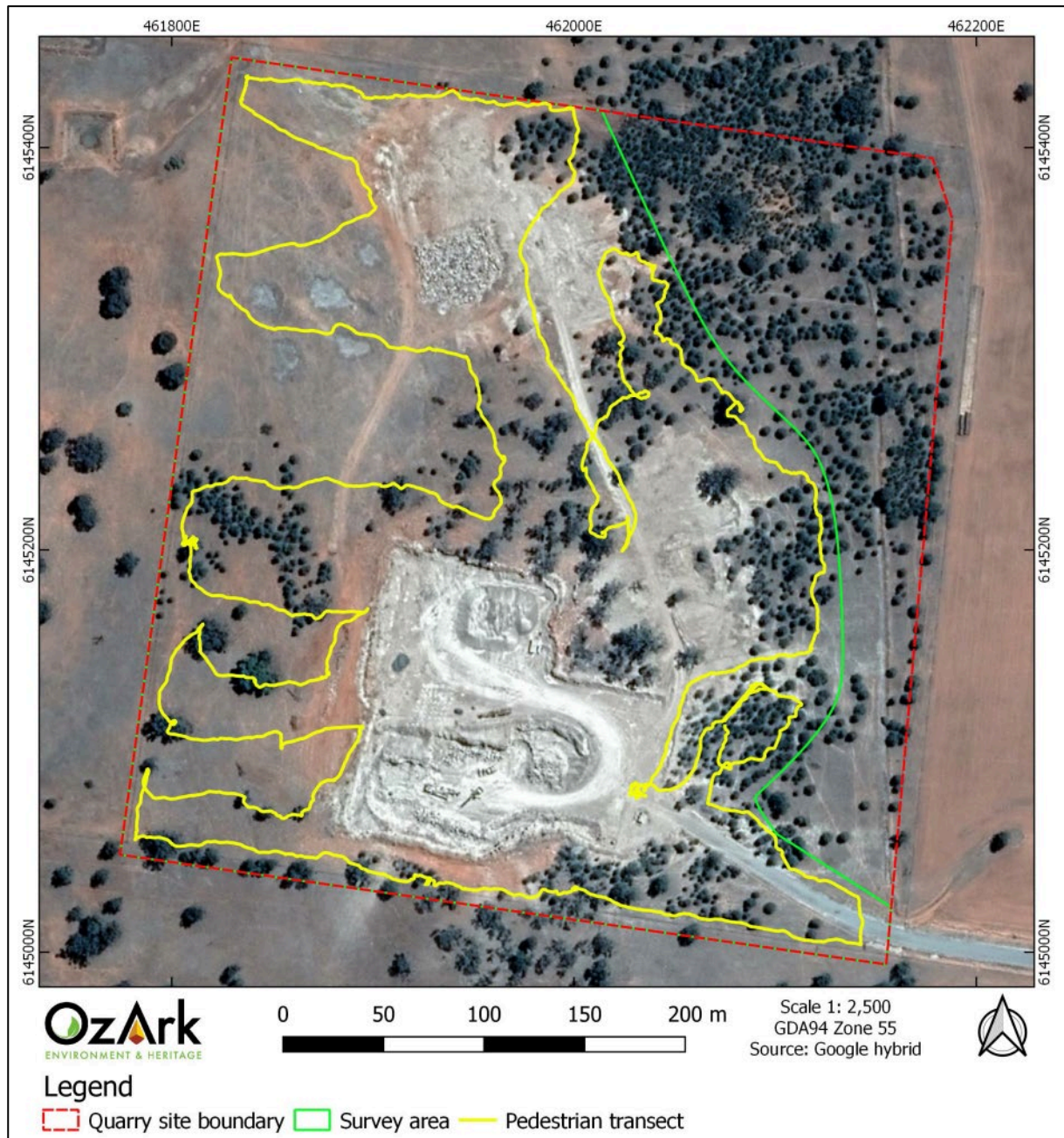
The entirety of the survey area was assessed by pedestrian transects. This excludes the area of the existing quarry extraction and the associated tracks, as these areas have already been heavily disturbed and modified. All mature, native trees within the survey area and with the potential to contain Aboriginal scarring were inspected. Panasonic GPS tablets were used during the pedestrian survey to capture spatial data. General notes pertaining to the survey and ground cover were kept by the archaeologist.

The eastern side of the survey area consists of a moderate slope declining towards the Sturt Highway and Strontian Road (**Plate 1**). This area has been cleared of vegetation previously, as the existing vegetation consists primarily of smaller sized cypress pine trees. There are some more mature native trees along the top of slope near the track running along the east side of the existing quarry extraction area. These trees were all inspected for signs of cultural modification.

The central and western sections of the survey area are mostly flat, with only a slight decline to the north-western corner of the survey area. The northern extent has been cleared previously of vegetation and ground surface visibility (GSV) is moderate with short dead grasses and scattered gravels or rocks on the ground surface (**Plate 2**). The south-western section of the survey area is still partially vegetated with more mature native trees being present in the area (**Plate 3**).

**Figure 5-1** illustrates the pedestrian coverage of the survey area. Note that the pedestrian survey involved two surveyors, though the transects shown in **Figure 5-1** is only of one surveyor. No Aboriginal cultural heritage sites were recorded during the field survey and no landforms considered to have subsurface deposits or potential archaeological sensitivity were identified. Two historical features were recorded during the survey and these are detailed in **Section 5.3**.

Figure 5-1: Pedestrian coverage of the survey area.



## 5.2 EFFECTIVE SURVEY COVERAGE

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

GSV is defined as:

*... the amount of bare ground (or visibility) on the exposures which might reveal artefacts or other archaeological materials. It is important to note that visibility, on its own, is not a*

*reliable indicator of the detectability of buried archaeological material. Things like vegetation, plant or leaf litter, loose sand, stone ground or introduced materials will affect the visibility. Put another way, visibility refers to 'what conceals' (DECCW 2010: 39).*

GSE is defined as:

*... different to visibility because it estimates the area with a likelihood of revealing buried artefacts or deposits rather than just being an observation of the amount of bare ground. It is the percentage of land for which erosion and exposure was sufficient to reveal archaeological evidence on the surface of the ground. Put another way, exposure refers to 'what reveals' (DECCW 2010: 37).*

**Table 5-1** calculates the effective survey coverage within the study area. In general, **Table 5-1** presents an approximation of the amount of ground surface able to be seen at any location within particular landform units. The GSV was variable depending on landform. The GSV was low-moderate across the sloping landforms (GSV was 40% within a GSE of 50%), with short grasses, patches of scalding and some gravels being present on the ground surface. The soil in this section was a light tan/brown loam, thin in most areas, especially around any scalding. The effective coverage for the part of the study area is 20%.

On the elevated flats and upper slope landforms, the GSV was approximately 50% within a GSE of 75%. The soil across this landform is a red/brown loam, and there is less erosion occurring across this part of the study area. The effective coverage for this landform is 38%.

**Table 5-1: 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	Elevated flats and upper slope	69814	50	75	26180	38
2	Slopes	40873	40	50	8175	20

**Table 5-2** demonstrates that despite relatively high survey efficacy within the sloping landforms and the elevated flats and upper slope landforms (20% and 38% respectively), no Aboriginal sites or features were recorded during the survey.

**Table 5-2: Effective survey coverage and incidences of Aboriginal 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
Elevated flats and upper slope	69814	26180	38	0	0
Slopes	40873	8175	20	0	0



### 5.3 ABORIGINAL CULTURAL HERITAGE VALUES RECORDED

No Aboriginal Cultural Heritage sites were recorded during the assessment.

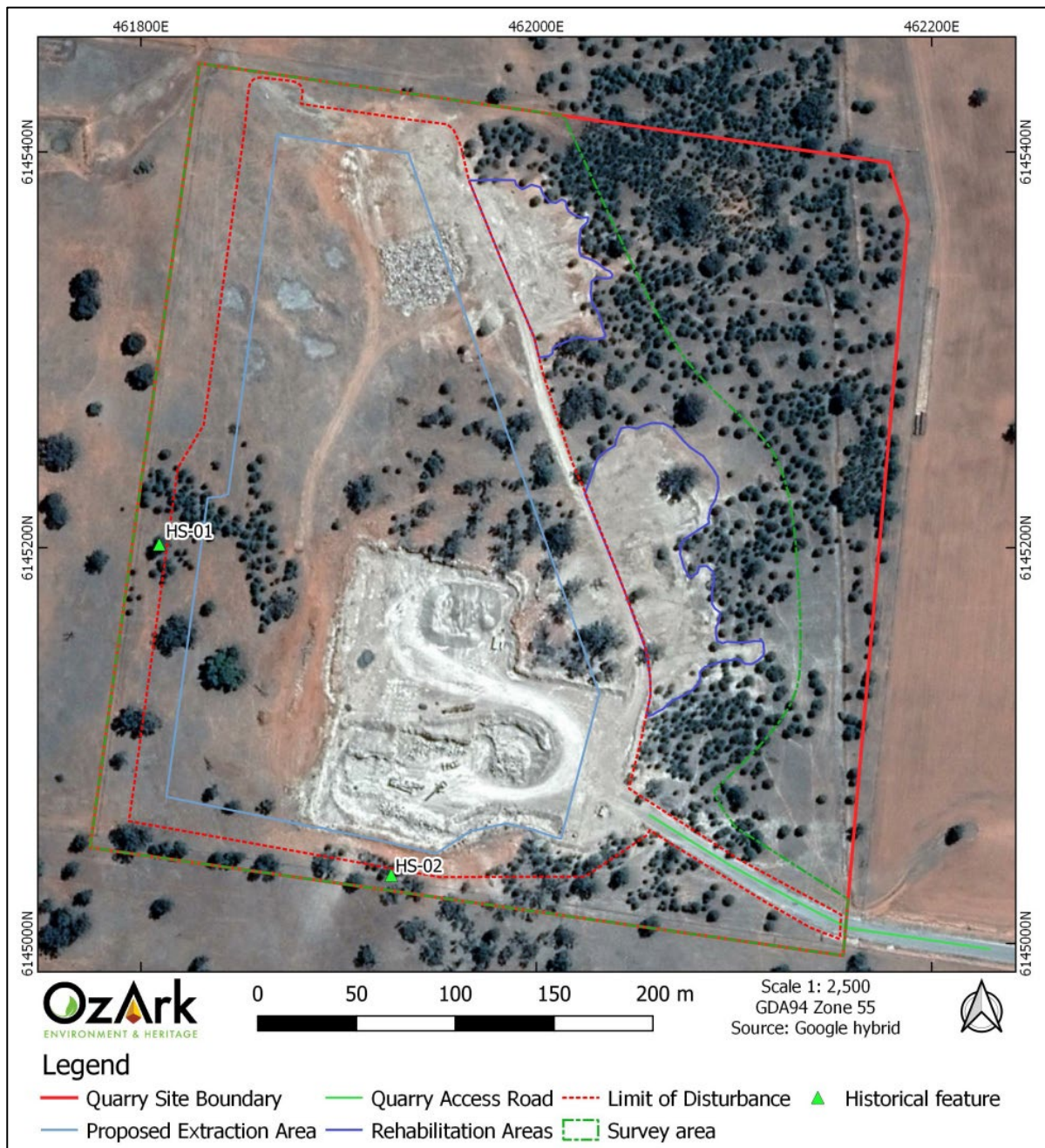
### 5.4 HISTORICAL HERITAGE ITEMS RECORDED

Table 5-3 summarises the historical items recorded during the survey of the study area. Further details on each site follows.

Table 5-3: Historical features recorded during the survey.

Feature Name	Feature(s)	Survey Unit	Landform
Strontian HS-01	Survey blaze tree	2	Elevated flats and upper slope
Strontian HS-02	Stone cairn trigonometrical station	2	Elevated flats and upper slope

Figure 5-2: Location of recorded historical items.



## **Strontian HS-01**

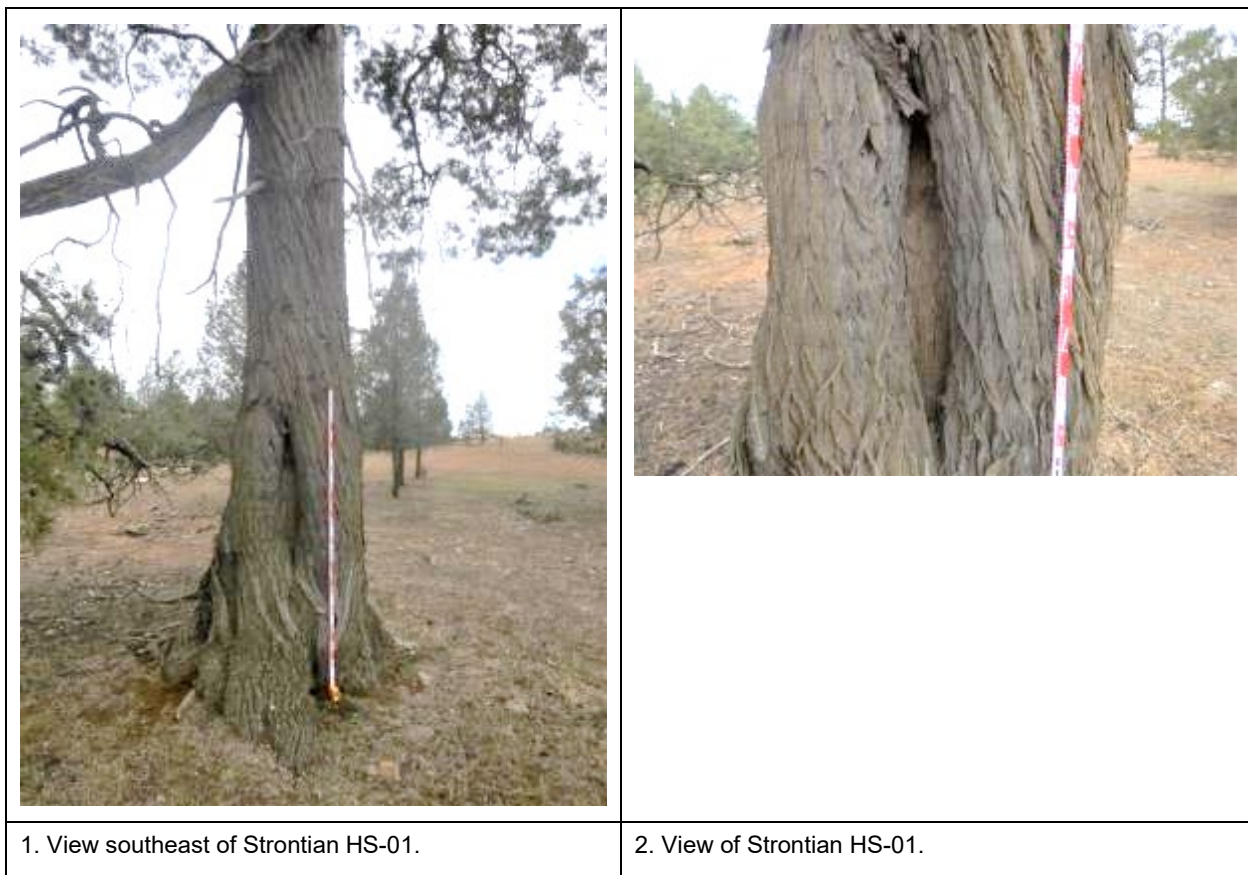
**Site Type:** Survey blaze tree

**GPS Coordinates:** 461811 E / 6145211 N (GDA94 Zone 55)

**Location of Site:** This item is located along the western boundary of the study area. It is approximately 770 m west of the intersection of Sturt Highway and Strontian Road (**Figure 5-2**).

**Description of Site:** The blaze tree is located next to a stand of regrowth cypress pine trees. It is a mature tree is approximately 20 m in height. There is one scar cut from the bark of the tree. Engraved on the face of the scar is 'CR' and above an arrow pointing to the southeast. The marker scar is on the north-western side of the tree. The scar is located approximately 70 centimetres (cm) from the ground surface. It is approximately 55 cm in length, 15 cm in width and 8 cm depth with regrowth present (**Figure 5-3**).

**Figure 5-3: Strontian HS-01. View of feature and marker scar.**



## **Strontian HS-02**

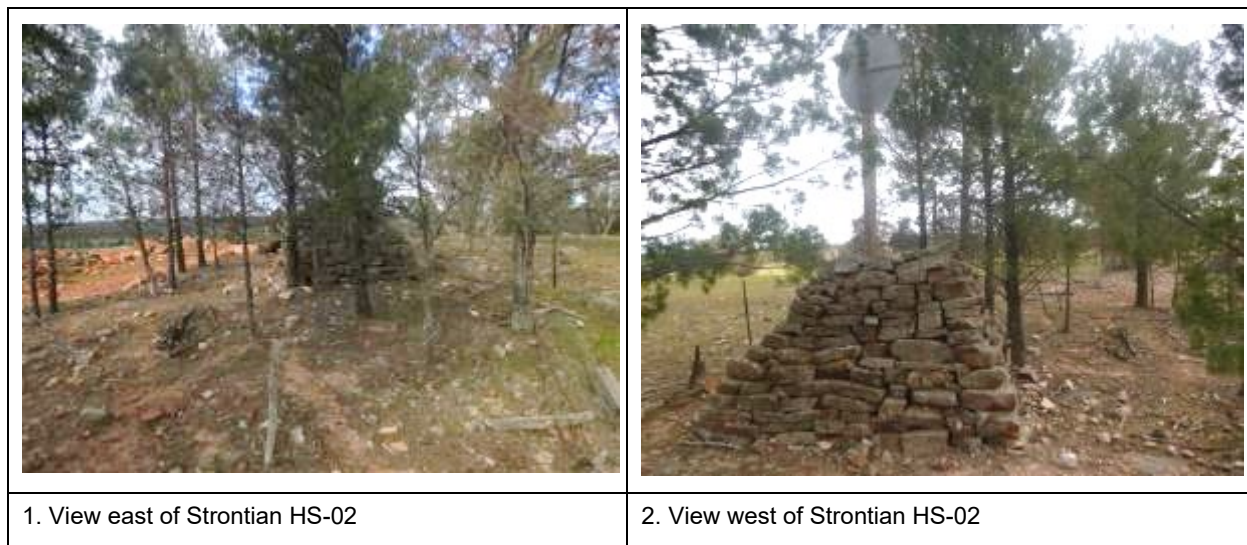
**Site Type:** Stone cairn trigonometrical station

**GPS Coordinates:** 461928 E / 6145035 N (GDA94 Zone 55)

**Location of Site:** This item is located along the southern boundary of the study area. It is approximately 660 m southwest of the intersection of Sturt Highway and Strontian Road (**Figure 5-2**).

**Description of Site:** The feature consists of a stone cairn. The cairn is located in a stand of smaller pine trees next to the southern fence line. It is approximately 2 m in diameter and 1.5 m in height. The cairn is made up of roughly flat irregular pieces of sandstone (**Figure 5-4**). There is a wooden post with a metal circular feature on the top of coming out of the top centre of the cairn. The cairn is marking the highest point of Buckingham Hill and is a surveying trigonometrical station (see Marshall 2002: 98 for an example).

**Figure 5-4: Strontian HS-02. View of feature.**



## **5.5 DISCUSSION OF SURVEY RESULTS**

The results of the database search undertaken in **Section 4.3.1** identified 101 Aboriginal sites within 10 km of the study area, with the most common site type being artefact scatters. The predictive model (**Section 4.4**) considered the site types that would most likely be identified in the study area and concluded that low density stone artefact sites and scarred trees would be the most likely based on other studies in the region.

Some outcropping stone was identified in the study area but was generally associated with the quarry works and extensive disturbances indicate an unlikely occurrence for burials or Aboriginal stone procurement. Previous works as a result of quarrying and grazing, has modified and cleared much of the landscape within the study area. Mature trees that were identified within the study area did not contain evidence to suggest Aboriginal cultural scarring.

Two historical features were recorded during the survey, Strontian HS-01 and Strontian HS-02. Strontian HS-01 is a survey blaze tree and Strontian HS-02 is a stone cairn trigonometrical station used to mark the highest point of Buckingbong Hill.

## 6 RESULTS OF THE IMPACT ASSESSMENT

### 6.1 ABORIGINAL CULTURAL HERITAGE

No Aboriginal sites were recorded during the assessment. As such, there will be no impact to Aboriginal objects or cultural heritage values by the Proposal.

### 6.2 HISTORIC HERITAGE SITES

There are two historic features recorded within the study area. There will be no impacts to either historic feature by the proposed works.

#### 6.2.1 Assessment of historic heritage significance

##### 6.2.1.1 Assessment of significance-general principles

The current assessment will evaluate the heritage significance of the historic heritage sites identified within the study area in accordance with the NSW Heritage Office guidelines for *Assessing Heritage Significance* (Heritage Office 2001). A historic heritage site must satisfy at minimum one of the following criteria to be assessed as having heritage significance:

**Criterion (a):** *An item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area).*

**Criterion (b):** *An item has a strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area).*

**Criterion (c):** *An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area).*

**Criterion (d):** *An item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons.*

**Criterion (e):** *An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area).*

**Criterion (f):** *An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area).*

**Criterion (g):** *An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places; or cultural or natural environments (or a class of the local area's cultural or natural places; or cultural or natural environments).*

Significance assessments are carried out on the basis that decisions about the future of heritage items must be informed by an understanding of these items' heritage values. The *Australia*

*ICOMOS Burra Charter* (Australia ICOMOS 2013) recognises four categories of heritage value: historic, aesthetic, scientific, and social significance

Items are categorised as having local or state level, or no significance. The level of significance is assessed in accordance with the geographical extent of the item's value. An item of state significance is one that is important to the people of NSW whilst an item of local significance is one that is principally important to the people of a specific LGA.

### 6.2.1.2 Assessment of significance of historic items

**Table 6-1** details the assessed significance of recorded historic heritage items in accordance with the NSW Heritage Office guidelines and the *Burra Charter* (Australia ICOMOS 2013).

**Table 6-1: Historic heritage: assessment of significance.**

Site Name	Level of Significance
Strontian HS-01	Nil
Strontian HS-02	Nil

#### **Strontian HS-01**

**Table 6-2** assesses Strontian HS-01 against the assessment criteria established in the Heritage Office publication, *Assessing Heritage Significance* (Heritage Office 2001). Strontian HS-01 is a survey blaze tree.

**Table 6-2: Assessment of heritage significance – Strontian HS-01.**

Criteria	Comments	Significance
<b>a</b>	The site does not show evidence of a significant human activity.	Nil
<b>b</b>	There are no known associations of the sites with a significant event, person or group of persons.	Nil
<b>c</b>	The site is typical of survey marker trees from the late 19 <sup>th</sup> Century to the mid-20 <sup>th</sup> Century.	Nil
<b>d</b>	There are no known associations of the site with an identifiable group or a community's sense of place.	Nil
<b>e</b>	The site has little potential for further scientific and/or archaeological information. It does not have the qualities of an important benchmark or reference site or type.	Nil
<b>f</b>	The site is not a rare site type for the Narrandera region or NSW.	Nil
<b>g</b>	The site does not represent well the characteristics of the site type.	Nil

#### **Strontian HS-02**

**Table 6-3** assesses Strontian HS-02 against the assessment criteria established in the Heritage Office publication, *Assessing Heritage Significance* (Heritage Office 2001). Strontian HS-02 is a stone cairn trigonometrical station.

**Table 6-3: Assessment of heritage significance – Strontian HS-02.**

Criteria	Comments	Significance
a	The site does not show evidence of a significant human activity.	Nil
b	There are no known associations of the sites with a significant event, person or group of persons.	Nil
c	The site is not aesthetically pleasing and does not contribute to the cultural landscape of the area.	Nil
d	There are no known associations of the site with an identifiable group or a community's sense of place.	Nil
e	The site has little potential for further scientific and/or archaeological information. It does not have the qualities of an important benchmark or reference site or type.	Nil
f	The site is not a rare site type for the Narrandera region or NSW.	Nil
g	The site does not represent well the characteristics of the site type.	Nil

### 6.2.2 Discussion

The two historical features, Strontian HS-01 and Strontian HS-02, are survey markers and Strontian HS-02 probably remains an important surveying feature. However, as outlined in **Table 6-2** and **Table 6-3** the historical features do not meet the criteria for local, state or national significance.

### 6.2.3 Likely impacts to historic heritage from the Project

**Table 6-4** details the impacts to historical features from the Proposal. Strontian HS-01 and Strontian HS-02 will not be impacted by the proposed works. **Figure 5-2** shows the proposed impacts and the location of the historical features.

**Table 6-4: Historic heritage: impact assessment.**

Survey Area	Site Name	Will this site be impacted?
2	Strontian HS-01	No
2	Strontian HS-02	No

## 6.3 MANAGEMENT AND MITIGATION: HISTORIC HERITAGE

### 6.3.1 General principles for the management of historic sites

Appropriate management of heritage items is primarily determined on the basis of their assessed significance as well as the likely impacts of the Proposal.

In terms of best practice and desired outcomes, avoiding impact to any historical item is a preferred outcome, however, where a historical site has been assessed as having no heritage value, impacts to these items does not require any legislated mitigation.

### 6.3.2 Management and mitigation of recorded historic sites

The removal or destruction of survey marks is costly to the community. Section 24(1) of the *Surveying and Spatial Information Act 2002* states that a person must not remove, damage,

destroy, displace, obliterate or deface any survey mark unless authorised to do so by the Surveyor General. A person found guilty of breaching the Act by a Court, may be required to pay a penalty up to \$20,000.

Therefore, while these items may not have heritage values (see **Section 6.2.1**), they must not be disturbed without permission.

Should these items need to be impacted, the proponent should email LPI Survey Services at SCIMS@lpi.nsw.gov.au, detailing the mark type and number, proposed scope of works and scheduling. Allow for 10 working days for an appropriate response.

It is preferable that works avoid disturbing or destroying survey marks by: 1. diverting works to avoid disturbing the marks or 2. contacting a registered surveyor to place and survey a mark at a more suitable site nearby to maintain survey integrity. Any survey necessary to recover the position of survey marks proposed to be destroyed may only be undertaken by a surveyor registered under the *Surveying and Spatial Information Act 2002* or by survey staff authorised by the Surveyor General.



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## 7 RECOMMENDATIONS

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

To this end it is noted that no Aboriginal sites were recorded during the assessment.

The following recommendations are made based on these impacts and with regard to:

- Legal requirements under the terms of the NPW Act whereby it is illegal to damage, deface or destroy an Aboriginal place or object without the prior written consent of Heritage NSW
- The findings of the current investigations undertaken within the survey area
- The interests of the Aboriginal community.

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

1. The proposed work may proceed at Strontian Quarry without further archaeological investigation under the following conditions:
  - a) All land and ground disturbance activities must be confined to within the archaeological survey area, as this will eliminate the risk of harm to Aboriginal objects in adjacent landforms. Should the parameters of the Proposal extend beyond the assessed areas, then further archaeological assessment may be required.
  - b) All staff and contractors involved in the proposed work should be made aware of the legislative protection requirements for all Aboriginal sites and objects.
2. This assessment has concluded that there is a low likelihood that the proposed work will adversely harm Aboriginal cultural heritage sites. However, if Aboriginal objects are identified during the construction and operation of the Proposal, all work should cease and the procedures in the *Unanticipated Finds Protocol* (**Appendix 3**) should be followed.
3. In the event of skeletal remains being identified during the construction and operation of the Proposal, the *Unanticipated Skeletal Remains Protocol* (**Appendix 4**) should be followed.
4. Work crews should undergo cultural heritage induction to ensure they recognise Aboriginal artefacts (see **Appendix 5**) and are aware of the legislative protection of Aboriginal objects under the *National Parks and Wildlife Act 1974* and the contents of the *Unanticipated Finds Protocol*.

5. Two historical features were recorded, a survey blaze tree and a trigonometric station. Both are assessed as having 'nil' heritage values (**Table 6-1**). However, Section 24(1) of the *Surveying and Spatial Information Act 2002* states that a person must not remove, damage, destroy, displace, obliterate or deface any survey mark unless authorised to do so by the Surveyor General (see **Section 6.3.2** for further details).
6. In the unlikely event that historical relics or deposits are unearthed during the proposed works, the Historical Heritage Unanticipated Finds Protocol (**Appendix 6**) should be followed.

## REFERENCES

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## PLATES



Plate 1: View south across eastern section of study area and within a sloping landform.



Plate 2: View west across northern boundary of study area.



Plate 3: View east from south-western corner of study area.

## APPENDIX 1: ABORIGINAL COMMUNITY CONSULTATION LOG

Aboriginal Consultation Log - Milbrae Quarries (Strontian, Walleroobie & Hillview)			
Date	Organisation	Comment	Method
28.8.19	Narrandera Local Aboriginal Land Council	Rebecca Hardman (RH) sent invite to fieldwork at Strontian & Walleroobie Quarries	Email
28.8.19	Griffith Local Aboriginal Land Council	RH sent invite to fieldwork at Strontian Quarry	Email
29.8.19	Griffith Local Aboriginal Land Council	RH received confirmation will attend fieldwork and a copy of Workers compensation insurance	Email
29.8.19	Griffith Local Aboriginal Land Council	RH thanked Stephen	Email
2.9.19	Griffith Local Aboriginal Land Council	RH received contact details for site officer	Email
2.9.19	Griffith Local Aboriginal Land Council	RH thanked Stephen	Email
2.9.19	Narrandera Local Aboriginal Land Council	RH sent notification that fieldwork may not go ahead and that she would notify them as soon as she has more information.	Email
2.9.19	Griffith Local Aboriginal Land Council	RH sent notification that fieldwork may not go ahead and that she would notify them as soon as she has more information.	Email
3.9.19	Narrandera Local Aboriginal Land Council	RH sent amended fieldwork letter	Email
3.9.19	Griffith Local Aboriginal Land Council	RH sent amended fieldwork letter	Email
3.9.19	Narrandera Local Aboriginal Land Council	RH phoned N/A	Email
5.9.19	Narrandera Local Aboriginal Land Council	RH received confirmation will attend fieldwork	Email
5.9.19	Narrandera Local Aboriginal Land Council	RH thanked Michelle and requested workers compensation, name and contact number for the site officer	Email
5.9.19	Narrandera Local Aboriginal Land Council	RH received phone call from Michelle, she thought she had sent through workers compensation. Clarified not received. Will re send as had projects confused	Phone
5.9.19	Narrandera Local Aboriginal Land Council	RH received copy of workers comp	Email
5.9.19	Narrandera Local Aboriginal Land Council	RH thanked Michelle	Email
9.9.19	Griffith Local Aboriginal Land Council	RH received call from Stephen, will attend fieldwork and will send copy of workers comp through today	Phone
17.9.19	Narrandera Local Aboriginal Land Council	RH received email: <i>Sorry I haven't been in contact. I've been off work a few days and haven't had the opportunity to contact you.</i> <i>I have current workers compensation docs as requested and Derrick Lyons (field officer) on call this morning (if work is still going ahead)</i>	Email
17.9.19	Narrandera Local Aboriginal Land Council	RH phoned landline to confirm site officer and that we have received copy of workers comp - N/A	Phone
18.9.19	Griffith Local Aboriginal Land Council	Alyce Cameron (AC) rang Neerim Carrol, site officer for FW, as he hadn't showed up at meeting location. No answer. Left voice message.	Phone
18.9.19	Griffith Local Aboriginal Land Council	AC rang Griffith LALC and spoke to Stephen about Neerim not showing up. Stephen said he would try to get hold of Neerim and ring AC back. Said he had checked with Neerim on Tuesday and that everything had been organised.	Phone

<b>Aboriginal Consultation Log - Milbrae Quarries (Strontian, Walleroobie &amp; Hillview)</b>			
<b>Date</b>	<b>Organisation</b>	<b>Comment</b>	<b>Method</b>
18.9.19	Griffith Local Aboriginal Land Council	AC rang Neerim Carrol again. No answer.	Phone
18.9.19	Griffith Local Aboriginal Land Council	AC rang Stephen to check if he had gotten hold of Neerim. Stephen said he hadn't managed to contact Neerim yet. AC also said she hadn't managed, and that Neerim's phone went to voicemail. AC said that she had to proceed with the survey. Stephen wasn't sure about it and wanted to contact some LALC members to check if ok. Said he would ring AC back.	Phone
18.9.19	Griffith Local Aboriginal Land Council	AC received phone call from Stephen. He couldn't get hold of any other members. AC said the survey had to occur today, and that it was for an impact assessment as opposed to ACHAR. AC said she would email Stephen with a post-FW update and some photos of the area to keep him informed.	Phone
19.9.19	Narrandera Local Aboriginal Land Council	RH received call asking do they invoice us or do we directly pay the site officer. RH advised they invoice us	Phone
23.9.19	Narrandera Local Aboriginal Land Council	RH received phone call confirming the site officers' hours	Phone
23.9.19	Narrandera Local Aboriginal Land Council	RH received call confirming the fee offered	Phone
23.9.19	Narrandera Local Aboriginal Land Council	RH received invoice	Email
25.09.19	Griffith Local Aboriginal Land Council	AC emailed Stephen regarding a post-FW update as promised last Wednesday morning when talking on the phone.	Email
1.10.19	Narrandera Local Aboriginal Land Council	RH sent email requesting bank details	Email



## Invitation to fieldwork



### OzArk Environment & Heritage

Dubbo T: 02 6882 0118  
 Queanbeyan enquiry@ozarkehm.com.au  
 Newcastle www.ozarkehm.com.au

ABN 59 104 582 354

145 Wingewarra St  
 PO Box 2069  
 DUBBO NSW 2830

28<sup>th</sup> August 2019

Members  
 Narrandera Local Aboriginal Land Council  
 PO Box 544  
 NARRANDERA NSW 2700  
 nlalc14@bigpond.com  
 02 6959 1823

### ABORIGINAL HERITAGE ASSESSMENT FOR THE PROPOSED: STRONTIAN QUARRY EXTENSION, NARRANDERA LGA AND WALLEROOBIE QUARRY EXTENSION, COOLAMON LGA

Dear Members,

Milbrae Quarries Pty Ltd (Milbrae Quarries) is proposing to expand the Strontian and Wallarobie Quarries, located in the Narrandera (Figure 1) and Coolamon LGA respectively (Figure 2). OzArk would like to invite you to provide one (1) Site Officer to participate in the one (1) day fieldwork, scheduled for Tuesday 10<sup>th</sup> September 2019.

**WE DO NOT CURRENTLY HAVE A COPY OF YOUR CURRENT WORKERS COMPENSATION CERTIFICATE, PLEASE SUBMIT A CURRENT COPY TO OZARK TO CONFIRM YOUR INTEREST IN THE FIELDWORK.**

**FIELD WORK DATE:** Tuesday 10th September 2019

**TIME TO MEET:** 8am

**LOCATION TO MEET:** Narrandera LALC  
 172 East St,  
 NARRANDERA NSW 2700 (Figure 3)

**DURATION:** One (1) day

**FEE OFFER:** The fee offered is [REDACTED] for the half day of participation in the fieldwork for the experienced Site Officer (excl. GST). This fee is all inclusive of travel, travel time, fuel, accommodation, meal expenses and participation in the field work. Breaks are not paid.

**OZARK FIELD STAFF:** Alyce Cameron  
 0430 586 040

**INVOICES:** Invoices are to be addressed to:

OzArk Environment & Heritage  
 C/- Sheridan Baker  
 PO Box 2069  
 Dubbo, NSW 2830  
 Sheridan@ozarkehm.com.au

PLEASE NOTE THE ABOVE FIELDWORK MAY BE CANCELLED AT SHORT NOTICE DUE TO CIRCUMSTANCES OUTSIDE OUR CONTROL. SHOULD THIS HAPPEN WE WILL CONTACT YOU AS SOON AS POSSIBLE AND ATTEMPT TO RESCHEDULE FOR A LATER DATE.

You must ensure that you or your representative has enough water and snacks / lunch for the duration of the fieldwork.

Personal Protective Equipment (PPE) – your Site Officer will need:

- Long pants and long sleeve shirt
- High visibility safety shirt / vest
- Enclosed, sturdy footwear
- Water / Sunscreen / Hat.

You or your representative must be physically fit and will need to identify if you have any medical conditions / allergies that should be known to other people participating in the fieldwork in the event of an emergency. The OzArk field director will send home anyone who they determine to be 'unfit for work' or who may pose a WH&S risk to themselves or others.

Please note, if you are sending a representative who has any underlying medical conditions or severe allergies, it is important that they have on their person appropriate treatment such as asthma inhalers or EpiPens and notify us accordingly.

As previously noted due to NSW WH&S legislation we need to have on record current Workers Compensation insurances before going into the field. Unfortunately, we will **NOT** be able to allow participation in the fieldwork without seeing your **current Workers Compensation Certificate of Currency**. These can be emailed through to [rebecca@ozarkehm.com.au](mailto:rebecca@ozarkehm.com.au). Please note that if you are unable to send a representative from your organisation, we will proceed with the fieldwork with the OzArk archaeologist only.

Please advise our office by Tuesday 3<sup>rd</sup> August 2019, if you are available as well as the name and contact number of the site officer who will participate in the fieldwork. After this date, if we have not heard from you, we will either proceed with the survey with the OzArk archaeologist only or offer this position to other relevant groups.

If you have any feedback or relevant cultural heritage knowledge that you would like to offer, please discuss with the archaeologist during the fieldwork or contact our office.

Should you have any queries in relation to the enclosed information please do not hesitate to contact our office.

Kind regards,



Rebecca Hardman  
**Consultation Officer**

Figure 1: Proposed Site Location for the Strontian Quarry

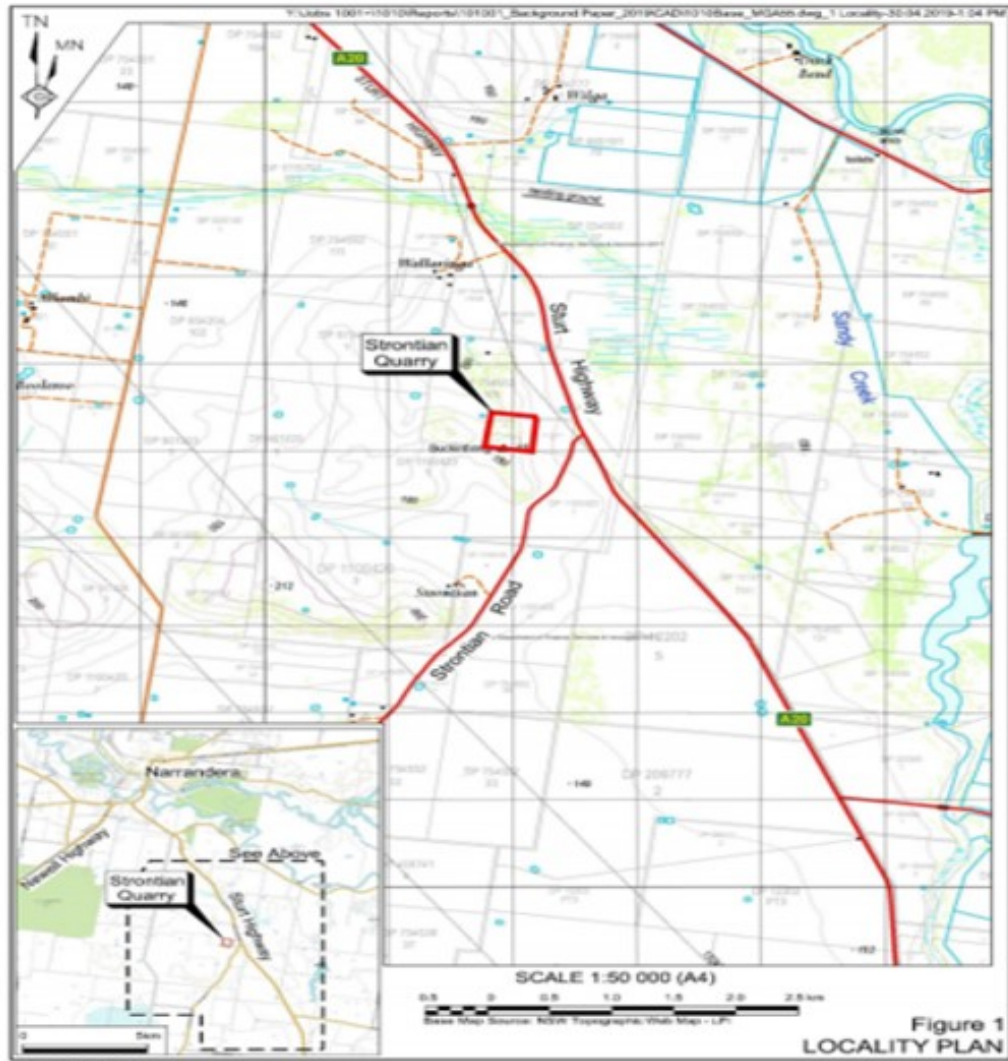


Figure 2: Proposed Site Location for the Walleroobie Quarry

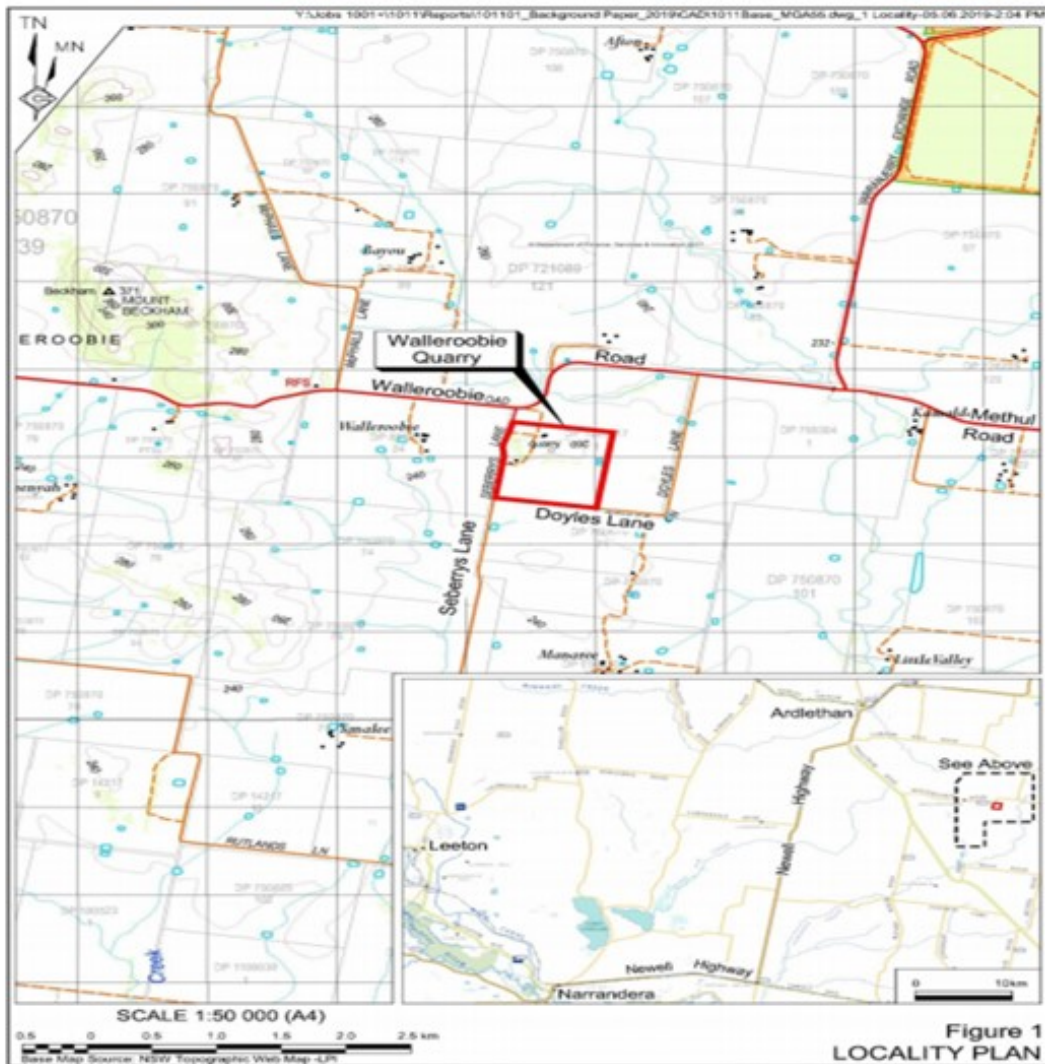
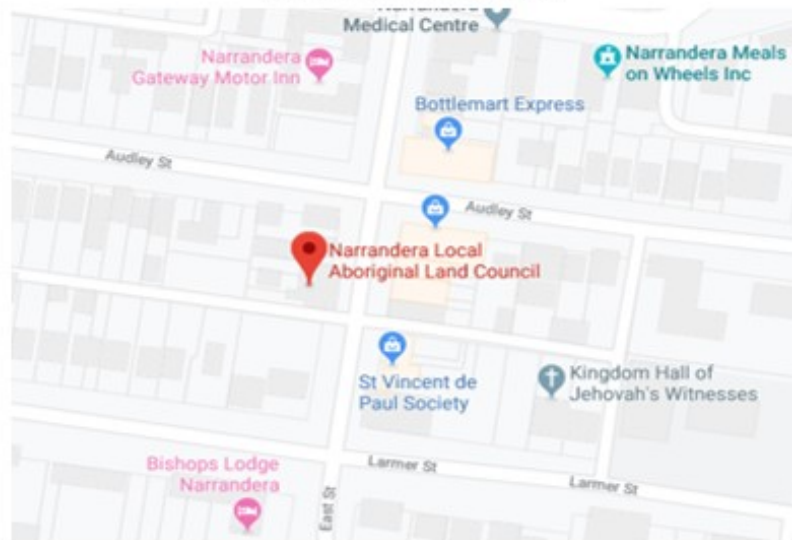



Figure 3: Meeting Location.



## Invitation to fieldwork (amended due to change of fieldwork date)

	<p>OzArk Environment &amp; Heritage</p> <p>Dubbo T: 02 6862 0118        Queanbeyan enquiry@ozarkehm.com.au        Newcastle www.ozarkehm.com.au</p>	<p>ABN 59 104 582 354</p> <p>145 Wingewarra St        PO Box 2069        DUBBO NSW 2830</p>
<p>3<sup>rd</sup> September 2019</p>		
<p>Members        Narrandera Local Aboriginal Land Council        PO Box 544        NARRANDERA NSW 2700        nialc14@bigpond.com        02 6959 1823</p>		
<p align="center"><b>ABORIGINAL HERITAGE ASSESSMENT FOR THE PROPOSED:        STRONTIAN QUARRY EXTENSION, NARRANDERA LGA AND        WALLEROOBIE QUARRY EXTENSION, COOLAMON LGA</b></p>		
<p>Dear Members,</p>		
<p>Milbrae Quarries Pty Ltd (Milbrae Quarries) is proposing to expand the Strontian and Wallarobie Quarries, located in the Narrandera (Figure 1) and Coolamon LGA respectively (Figure 2). OzArk would like to invite you to provide one (1) Site Officer to participate in the one (1) day fieldwork, scheduled for Tuesday 17<sup>th</sup> September 2019.</p>		
<p><b>WE DO NOT CURRENTLY HAVE A COPY OF YOUR CURRENT WORKERS COMPENSATION CERTIFICATE. PLEASE SUBMIT A CURRENT COPY TO OZARK TO CONFIRM YOUR INTEREST IN THE FIELDWORK.</b></p>		
<p><b>FIELD WORK DATE:</b></p>	<p>Tuesday 17th September 2019</p>	
<p><b>TIME TO MEET:</b></p>	<p>8am</p>	
<p><b>LOCATION TO MEET:</b></p>	<p>Narrandera LALC        172 East St,        NARRANDERA NSW 2700 (Figure 3)</p>	
<p><b>DURATION:</b></p>	<p>One (1) day</p>	
<p><b>FEE OFFER:</b></p>	<p>The fee offered is [REDACTED] for the full day of participation in the fieldwork for the experienced Site Officer (excl. GST). This fee is all inclusive of travel, travel time, fuel, accommodation, meal expenses and participation in the field work. Breaks are not paid.</p>	
<p><b>OZARK FIELD STAFF:</b></p>	<p>Alyce Cameron        0430 586 040</p>	

**INVOICES:** Invoices are to be addressed to:

OzArk Environment & Heritage  
 C/- Sheridan Baker  
 PO Box 2069  
 Dubbo, NSW 2830  
 Sheridan@ozarkehm.com.au

PLEASE NOTE THE ABOVE FIELDWORK MAY BE CANCELLED AT SHORT NOTICE DUE TO CIRCUMSTANCES OUTSIDE OUR CONTROL. SHOULD THIS HAPPEN WE WILL CONTACT YOU AS SOON AS POSSIBLE AND ATTEMPT TO RESCHEDULE FOR A LATER DATE.

You must ensure that you or your representative has enough water and snacks / lunch for the duration of the fieldwork.

Personal Protective Equipment (PPE) – your Site Officer will need:

- Long pants and long sleeve shirt
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You or your representative must be physically fit and will need to identify if you have any medical conditions / allergies that should be known to other people participating in the fieldwork in the event of an emergency. The OzArk field director will send home anyone who they determine to be 'unfit for work' or who may pose a WH&S risk to themselves or others.

Please note, if you are sending a representative who has any underlying medical conditions or severe allergies, it is important that they have on their person appropriate treatment such as asthma inhalers or EpiPens and notify us accordingly.

As previously noted due to NSW WH&S legislation we need to have on record current Workers Compensation insurances before going into the field. Unfortunately, we will **NOT** be able to allow participation in the fieldwork without seeing your **current Workers Compensation Certificate of Currency**. These can be emailed through to [rebecca@ozarkehm.com.au](mailto:rebecca@ozarkehm.com.au). Please note that if you are unable to send a representative from your organisation, we will proceed with the fieldwork with the OzArk archaeologist only.

Please advise our office by Tuesday 10<sup>th</sup> September 2019, if you are available as well as the name and contact number of the site officer who will participate in the fieldwork. After this date, if we have not heard from you, we will either proceed with the survey with the OzArk archaeologist only or offer this position to other relevant groups.

If you have any feedback or relevant cultural heritage knowledge that you would like to offer, please discuss with the archaeologist during the fieldwork or contact our office.

Should you have any queries in relation to the enclosed information please do not hesitate to contact our office.

Kind regards,



Rebecca Hardman  
**Consultation Officer**

Figure 1: Proposed Site Location for the Strontian Quarry

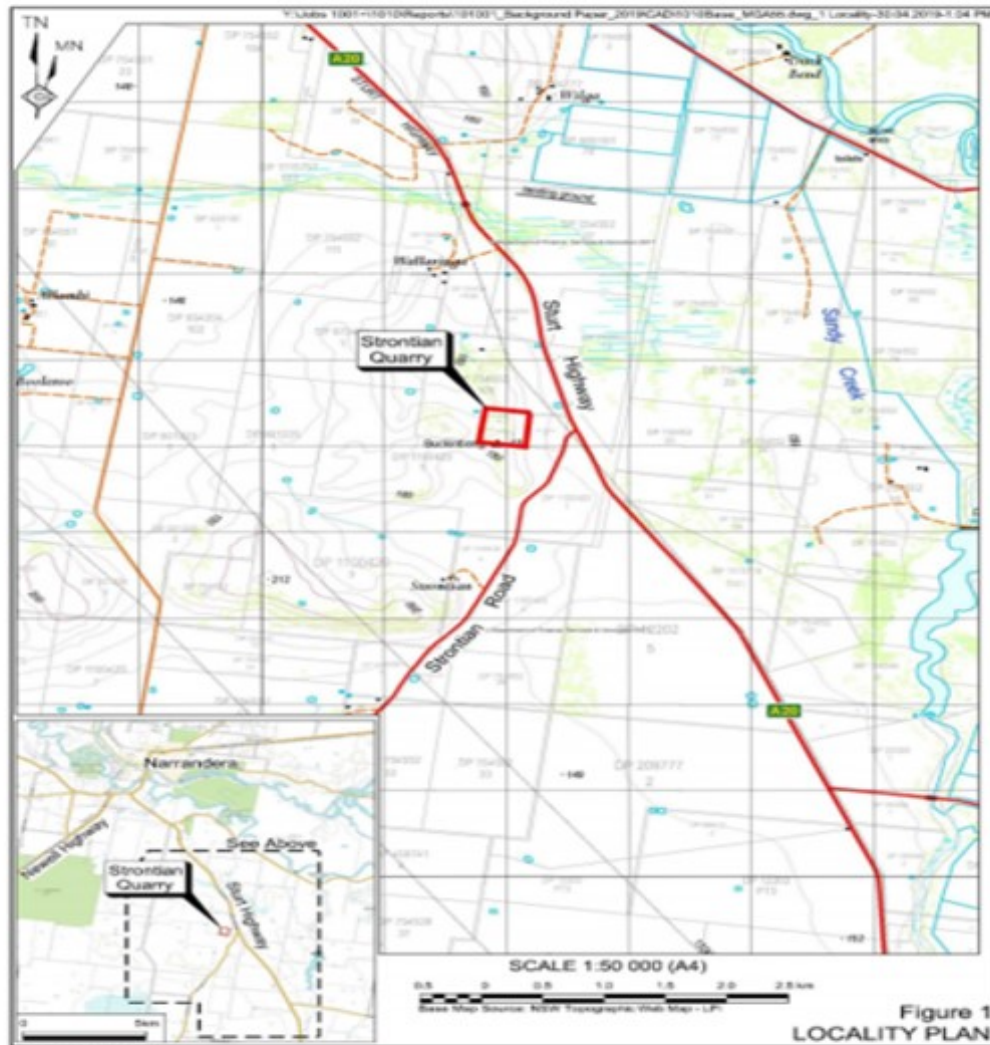


Figure 2: Proposed Site Location for the Walleroobie Quarry

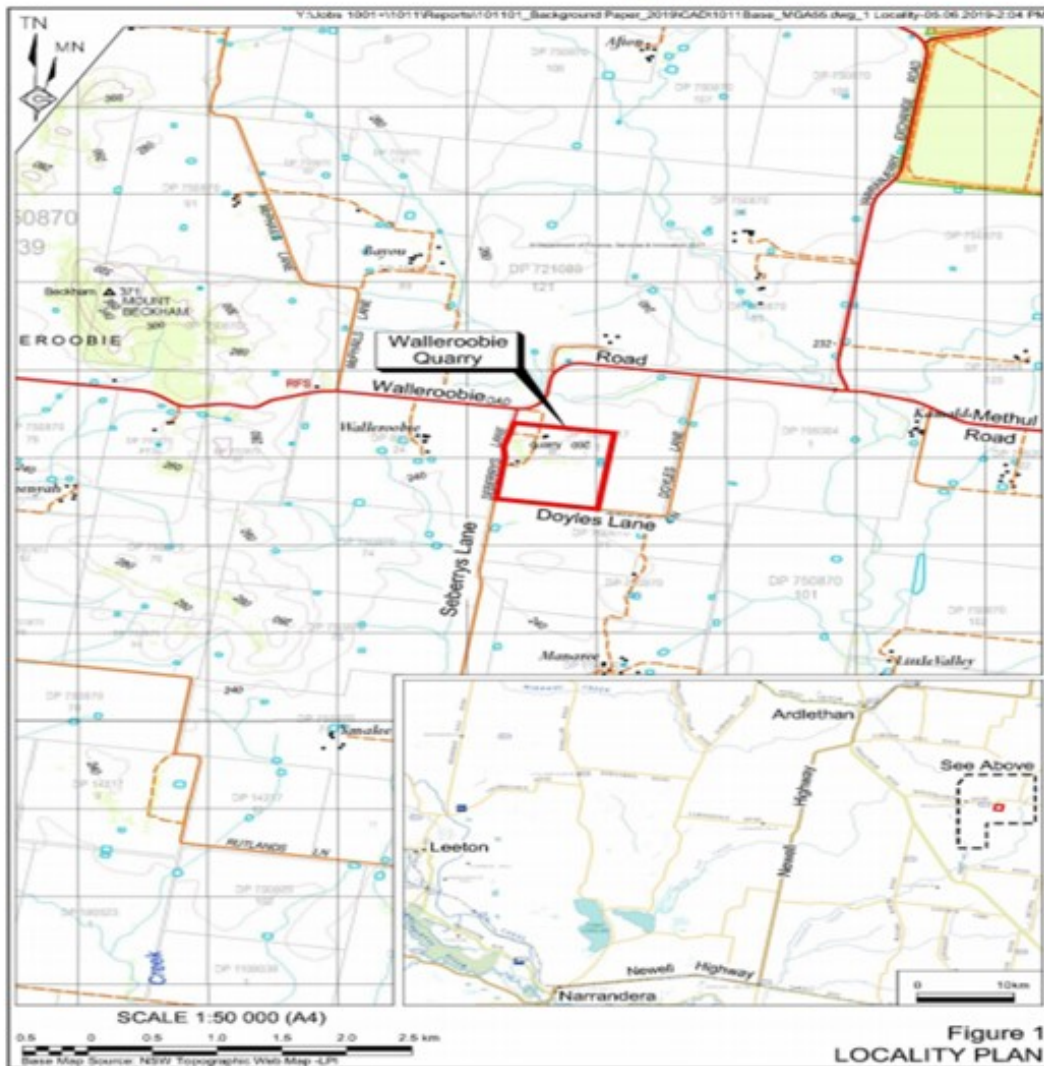
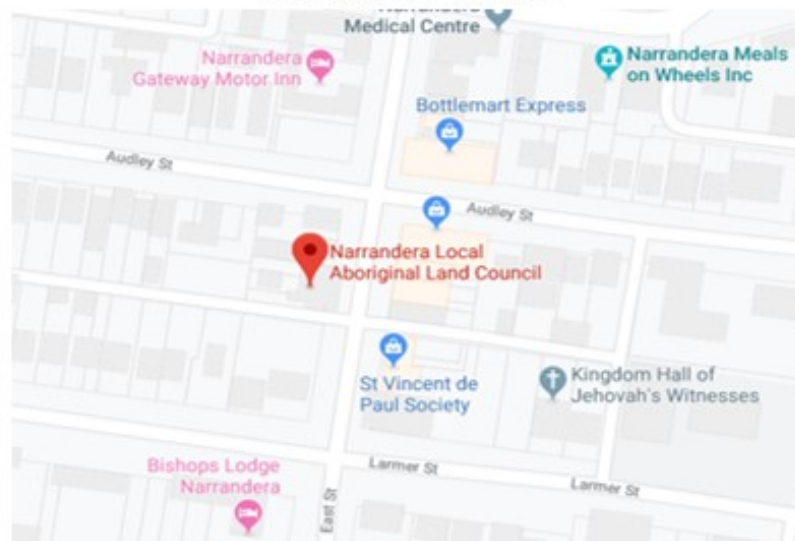



Figure 3: Meeting Location.






## APPENDIX 2: AHIMS SEARCH RESULTS

30 August 2019

 <b>AHIMS Web Services (AWS)</b> Extensive search - Site list report										Your Ref/PO Number : Strontian Qu 100m Client Service ID : 445890	
SiteID	SiteName	Datum	Zone	Easting	Northing	Contour	Site Status	SiteFeatures	Site Types	Reports	
49-6-1030	Folonsby Waterhole Creek Massacre	AGD	55	456000	6151600	Open site	Valid	Conflict: -	Massacre		
	<b>Contact</b>	<b>Recorders</b>									
49-6-1051	SHT 1	AGD	55	465000	6152955	Open site	Valid	Modified Tree (Carved or Scanned): 1		95034	
	<b>Contact</b>	<b>Recorders</b>									
49-6-1052	SHT 2	AGD	55	465715	6152955	Open site	Valid	Modified Tree (Carved or Scanned): 1		91054	
	<b>Contact</b>	<b>Recorders</b>									
49-6-1001	Narranderoo	AGD	55	459653	6151705	Open site	Destroyed	Modified Tree (Carved or Scanned): -	Scared Tree		
	<b>Contact</b>	<b>Recorders</b>									
49-6-1003	Cherishin Stock Reserve/Cuddah	AGD	55	451950	6152150	Open site	Valid	Artifact: - Shows	Open Camp Site/Quarry		
	<b>Contact</b>	<b>Recorders</b>									
49-6-1004	Bundigerry Creek 3/Bundigerry	AGD	55	462530	6154020	Open site	Valid	Artifact: -	Open Camp Site		
	<b>Contact</b>	<b>Recorders</b>									
49-6-1005	Tree 2B	AGD	55	452475	6146924	Open site	Valid	Modified Tree (Carved or Scanned): -	Scared Tree	418	
	<b>Contact</b>	<b>Recorders</b>									
49-6-1030	Back Throssonno (BRT)	AGD	55	471700	6137700	Open site	Valid	Modified Tree (Carved or Scanned): -	Scared Tree	2270,2498	
	<b>Contact</b>	<b>Recorders</b>									
49-6-1020	Folonsby Water Hole Creek	AGD	55	459300	6153540	Open site	Valid	Modified Tree (Carved or Scanned): -	Scared Tree		
	<b>Contact</b>	<b>Recorders</b>									
49-6-1030	Awoolie Solar Farm IP3	GDA	55	461265	6135921	Open site	Valid	Artifact: -			
	<b>Contact</b>	<b>Recorders</b>									
49-6-1166	DeLagard Barial Station	GDA	55	471595	6147511	Open site	Valid	Barial:			
	<b>Contact</b>	<b>Recorders</b>									
49-5-1185	Back Narranderoo SD 453018	GDA	55	453015	6153189	Open site	Valid	Modified Tree (Carved or Scanned): -			
	<b>Contact</b>	<b>Recorders</b>									

Report generated by AHIMS Web Service on 30/08/2019 for Alice Cameron for the following area at Datum: AGD, Zone: 55, Eastings: 451755 - 472207, Northings: 6134985 - 6155465 with a buffer of 0 meters. Additional Info: Background, Number of Aboriginal sites and Aboriginal objects found is 165  
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 <b>AHIMS Web Services (AWS)</b> Extensive search - Site list report										Your Ref/PO Number : Strontian Qu 100m Client Service ID : 445890	
SiteID	SiteName	Datum	Zone	Easting	Northing	Contour	Site Status	SiteFeatures	Site Types	Reports	
49-5-0228	Awoolie Solar Farm IP25	GDA	55	464022	6135971	Open site	Valid	Artifact: -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0229	Awoolie Solar Farm IP26	GDA	55	464640	6135979	Open site	Valid	Artifact: -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0234	Awoolie Solar Farm IP24 (Duplicate of 49-5-0197)	GDA	55	461927	6135500	Open site	Valid	Artifact: -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0141	Awoolie Isolated Field 14	GDA	55	463330	6136403	Open site	Valid	Artifact: -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0142	Awoolie Isolated Field 12	GDA	55	463129	6135532	Open site	Valid	Artifact: -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0143	Area 463511	GDA	55	463511	6135377	Open site	Valid	Artifact: -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0144	Area 463267 (Duplicate of 49-5-0200)	GDA	55	463267	6135232	Open site	Valid	Artifact: -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0145	Area 463273	GDA	55	463273	6135230	Open site	Valid	Artifact: -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0146	Area 463254	GDA	55	463254	6135230	Open site	Valid	Artifact: -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0147	Area 463277 (Duplicate of 49-5-0200)	GDA	55	463277	6135232	Open site	Valid	Artifact: -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0148	Area 463467	GDA	55	463467	6137712	Open site	Valid	Modified Tree (Carved or Scanned): -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0149	Area 461551	GDA	55	461553	6137586	Open site	Valid	Modified Tree (Carved or Scanned): -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0150	Area 462116	GDA	55	462110	6135792	Open site	Valid	Artifact: -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0151	Area 461812	GDA	55	461812	6135810	Open site	Valid	Aboriginal Ceremony and Dressing: -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0152	Area 461914	GDA	55	461914	6135910	Open site	Valid	Artifact: -			
	<b>Contact</b>	<b>Recorders</b>									
49-5-0153	Area 462130	GDA	55	462130	6135903	Open site	Valid	Artifact: -			

Report generated by AHIMS Web Service on 30/08/2019 for Alice Cameron for the following area at Datum: GDA, Zone: 55, Eastings: 451755 - 472207, Northings: 6134985 - 6155465 with a buffer of 0 meters. Additional Info: Background, Number of Aboriginal sites and Aboriginal objects found is 105  
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NSW Office of Environment & Heritage		AHIMS Web Services (AWS)					Your Ref/PO Number : Strontian Qu 104m			
		Extensive search - Site list report					Client Service ID : 445090			
SiteID	SiteName	Datum	Zone	Eastings	Northings	Contour	Site Status	Site Features	Site Types	Remarks
	Contact	Recorders	Mr Mark Sadler							
49-6-0154	Area 462131	GDA	55	462131	6135942	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Mark Sadler							
49-6-0155	Area 462150	GDA	55	462150	6136178	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Mark Sadler							
49-6-0156	Area 462156	GDA	55	462156	6136139	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, Mr Mark Sadler, NGH Heritage							
49-6-0157	Area 461986	GDA	55	461986	6136311	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Mark Sadler							
49-6-0158	Area 462185	GDA	55	462185	6135149	Open site	Valid	Modified Tree (Carved or Scarred) :-		Permits
	Contact	Recorders	Mr Mark Sadler							
49-6-0159	Area 462117	GDA	55	462117	6135134	Open site	Valid	Modified Tree (Carved or Scarred) :-		Permits
	Contact	Recorders	Mr Mark Sadler							
49-6-0160	Area 462113	GDA	55	462113	6135135	Open site	Valid	Modified Tree (Carved or Scarred) :-		Permits
	Contact	Recorders	Mr Mark Sadler							
49-6-0161	Area 462104	GDA	55	462104	6135137	Open site	Valid	Modified Tree (Carved or Scarred) :-		Permits
	Contact	Recorders	Mr Mark Sadler							
49-6-0162	Area 462086	GDA	55	462086	6135141	Open site	Valid	Modified Tree (Carved or Scarred) :-		Permits
	Contact	Recorders	Mr Mark Sadler							
49-6-0163	Area 462127	GDA	55	462127	6135219	Open site	Valid	Modified Tree (Carved or Scarred) :-		Permits
	Contact	Recorders	Mr Mark Sadler							
49-6-0164	Area 462114	GDA	55	462114	6135135	Open site	Valid	Modified Tree (Carved or Scarred) :-		Permits
	Contact	Recorders	Mr Mark Sadler							
49-6-0165	Area 462156	GDA	55	462156	6135428	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Mark Sadler							

Report generated by AHIMS Web Service on 30/08/2019 for Alys Cameron for the following areas: Datum: GDA, Zone: 55, Eastings: 451755 - 472207, Northings: 6134985 - 6135465 with a Buffer of 0 meters. Additional Info: Background, Number of Aboriginal sites and Aboriginal objects found is 105

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NSW Office of Environment & Heritage		AHIMS Web Services (AWS)					Your Ref/PO Number : Strontian Qu 104m			
		Extensive search - Site list report					Client Service ID : 445090			
SiteID	SiteName	Datum	Zone	Eastings	Northings	Contour	Site Status	Site Features	Site Types	Remarks
49-6-0115	Area Solar Farm IP18	GDA	55	462229	6137321	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0116	Area Solar Farm IP19	GDA	55	462232	6137323	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0117	Area Solar Farm IP20	GDA	55	462235	6137316	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0118	Area Solar Farm IP21	GDA	55	462239	6137306	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0119	Area Solar Farm IP22	GDA	55	462261	6137341	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0120	Area Solar Farm IP23	GDA	55	462284	6137365	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0121	Area Solar Farm IP24	GDA	55	462294	6137364	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0122	Area Solar Farm IP25	GDA	55	462293	6136324	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0123	Area Solar Farm IP27	GDA	55	462529	6136421	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0124	Area Solar Farm IP28	GDA	55	462785	6136858	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0125	Area Solar Farm IP29	GDA	55	461884	6136858	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0126	Area Solar Farm IP30	GDA	55	461875	6136877	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0127	Area Solar Farm IP31	GDA	55	461785	6136546	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0167	Area Solar Farm IP1	GDA	55	462785	6136356	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0168	Area Solar Farm IP2	GDA	55	461240	6136366	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0169	Area Solar Farm IP3	GDA	55	461230	6136516	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							
49-6-0170	Area Solar Farm IP35	GDA	55	461216	6136213	Open site	Valid	Artifact :-		Permits
	Contact	Recorders	Mr Matthew Barber, NGH Heritage							

Report generated by AHIMS Web Service on 30/08/2019 for Alys Cameron for the following areas: Datum: GDA, Zone: 55, Eastings: 451755 - 472207, Northings: 6134985 - 6135465 with a Buffer of 0 meters. Additional Info: Background, Number of Aboriginal sites and Aboriginal objects found is 105

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NSW Office of Environment & Heritage		AHIMS Web Services (AWS)				Your Site/PO number : Strontian Qu 100m Client Service ID : 415190				
		Extensive search - Site list report								
SiteID	SiteName	Datum	Zone	Eastings	Northings	Content	Site Status	SiteFeatures	SiteTypes	Reports
49-6-0171	Avenale Solar Farm H74 <a href="#">Contact</a>	GDA	SS	461257	6136313	Open site	Valid	Artefact :-		Permits
49-6-0172	Avenale Solar Farm H76 <a href="#">Contact</a>	GDA	SS	461218	6136197	Open site	Valid	Artefact :-		Permits
49-6-0173	Avenale Solar Farm H77 <a href="#">Contact</a>	GDA	SS	461310	6136138	Open site	Valid	Artefact :-		Permits
49-6-0174	Avenale Solar Farm H78 <a href="#">Contact</a>	GDA	SS	461917	6136918	Open site	Valid	Artefact :-		Permits
49-6-0175	Avenale Solar Farm H79 <a href="#">Contact</a>	GDA	SS	462915	6135755	Open site	Valid	Artefact :-		Permits
49-6-0176	Avenale Solar Farm H76 <a href="#">Contact</a>	GDA	SS	464134	6135567	Open site	Valid	Artefact :-		Permits
49-6-0177	Avenale Solar Farm H40 <a href="#">Contact</a>	GDA	SS	462935	6135938	Open site	Valid	Artefact :-		Permits
49-6-0178	Avenale Solar Farm H41 <a href="#">Contact</a>	GDA	SS	463359	6136313	Open site	Valid	Artefact :-		Permits
49-6-0179	Avenale Solar Farm H43 <a href="#">Contact</a>	GDA	SS	463371	6135571	Open site	Valid	Artefact :-		Permits
49-6-0180	Avenale Solar Farm H44 <a href="#">Contact</a>	GDA	SS	463934	6135401	Open site	Valid	Artefact :-		Permits
49-6-0181	Avenale Solar Farm H45 <a href="#">Contact</a>	GDA	SS	463949	6135511	Open site	Valid	Artefact :-		Permits
49-6-0182	Avenale Solar Farm H46 <a href="#">Contact</a>	GDA	SS	463949	6135512	Open site	Valid	Artefact :-		Permits
49-6-0183	Avenale Solar Farm H47 <a href="#">Contact</a>	GDA	SS	463980	6135108	Open site	Valid	Artefact :-		Permits
49-6-0184	Avenale Solar Farm H48 <a href="#">Contact</a>	GDA	SS	463793	6137064	Open site	Valid	Artefact :-		Permits
49-6-0185	Avenale Solar Farm H49 <a href="#">Contact</a>	GDA	SS	463944	6136947	Open site	Valid	Artefact :-		Permits
49-6-0186	Avenale Solar Farm H50 <a href="#">Contact</a>	GDA	SS	463130	6137758	Open site	Valid	Artefact :-		Permits
49-6-0187	Avenale Solar Farm H51 <a href="#">Contact</a>	GDA	SS	463319	6136441	Open site	Valid	Artefact :-		Permits


Report generated by AHIMS Web Services on 30/08/2019 for Alysia Cameron for the following area at Datum: GDA, Zone: SS, Eastings: 451755 - 472207, Northings: 6134985 - 6135465 with a Buffer of 0 meters. Additional Info: Background, Number of Aboriginal sites and Aboriginal objects found is 107  
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NSW Office of Environment & Heritage		AHIMS Web Services (AWS)				Your Site/PO number : Strontian Qu 100m Client Service ID : 445190				
		Extensive search - Site list report								
SiteID	SiteName	Datum	Zone	Eastings	Northings	Content	Site Status	SiteFeatures	SiteTypes	Reports
49-6-0188	Avenale Solar Farm H52 <a href="#">Contact</a>	GDA	SS	463874	6136407	Open site	Valid	Artefact :-		Permits
49-6-0189	Avenale Solar Farm H53 <a href="#">Contact</a>	GDA	SS	462125	6135223	Open site	Valid	Artefact :-		Permits
49-6-0190	Avenale Solar Farm H54 <a href="#">Contact</a>	GDA	SS	462185	6135324	Open site	Valid	Artefact :-		Permits
49-6-0191	Avenale Solar Farm H55 <a href="#">Contact</a>	GDA	SS	462241	6135301	Open site	Valid	Artefact :-		Permits
49-6-0192	Avenale Solar Farm H56 <a href="#">Contact</a>	GDA	SS	463490	6135264	Open site	Valid	Artefact :-		Permits
49-6-0193	Avenale Solar Farm H57 <a href="#">Contact</a>	GDA	SS	463490	6135264	Open site	Valid	Artefact :-		Permits
49-6-0194	Avenale Solar Farm H58 <a href="#">Contact</a>	GDA	SS	463490	6135264	Open site	Valid	Artefact :-		Permits
49-6-0195	Avenale Solar Farm H59 <a href="#">Contact</a>	GDA	SS	463214	6135447	Open site	Valid	Artefact :-		Permits
49-6-0196	Avenale Solar Farm H60 <a href="#">Contact</a>	GDA	SS	461764	6136247	Open site	Valid	Artefact :-		Permits
49-6-0197	Avenale Solar Farm H61 (Synonyms of 49-6-0194) <a href="#">Contact</a>	GDA	SS	463490	6135264	Open site	Valid	Artefact :-		Permits
49-6-0198	Avenale Solar Farm Artefact Scatter 4 <a href="#">Contact</a>	GDA	SS	463739	6135117	Open site	Valid	Artefact :-		Permits
49-6-0199	Avenale Solar Farm Artefact Scatter 1 <a href="#">Contact</a>	GDA	SS	461037	6136131	Open site	Valid	Artefact :- Modified Tree (Carved or Scarred)		Permits
49-6-0200	Avenale Solar Farm Artefact Scatter 3 <a href="#">Contact</a>	GDA	SS	463282	6135247	Open site	Valid	Artefact :-		Permits
49-6-0201	Avenale Solar Farm Artefact Scatter 2 <a href="#">Contact</a>	GDA	SS	463911	6135275	Open site	Valid	Artefact :-		Permits
49-6-0202	Avenale Solar Farm H72 <a href="#">Contact</a>	GDA	SS	463939	6135181	Open site	Valid	Artefact :-		Permits
49-6-0203	Avenale Solar Farm H74 <a href="#">Contact</a>	GDA	SS	464133	6135567	Open site	Valid	Artefact :-		Permits
49-6-0204	Avenale Solar Farm H75 <a href="#">Contact</a>	GDA	SS	464133	6135564	Open site	Valid	Artefact :-		Permits

Report generated by AHIMS Web Services on 30/08/2019 for Alysia Cameron for the following area at Datum: GDA, Zone: SS, Eastings: 451755 - 472207, Northings: 6134985 - 6135465 with a Buffer of 0 meters. Additional Info: Background, Number of Aboriginal sites and Aboriginal objects found is 107  
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 Office of Environment & Heritage		<b>AHIMS Web Services (AWS)</b> Extensive search - Site list report					Your Report Number : Strontian Qu 108a Client Service ID : 445890			
SiteID	SiteName	Status	Zone	Eastings	Northings	Context	Site Status	SiteEstimate	SiteType	Reports
49-5-0205	Avonka Solar Farm IP7 Contact	Recorders	Mr Matthew Barber, NHT Heritage	Pre-trial	QDA	55 464125 6125584	Open site	Valid	Artifact -	Permits
49-5-0206	Avonka Solar Farm IP8 Contact	Recorders	Mr Matthew Barber, NHT Heritage	Pre-trial	QDA	55 464125 6125558	Open site	Valid	Artifact -	Permits
49-5-0207	Avonka Solar Farm IP9 Contact	Recorders	Mr Matthew Barber, NHT Heritage	Pre-trial	QDA	55 464107 6125582	Open site	Valid	Artifact -	Permits
49-5-0208	Avonka Solar Farm IP11 Contact	Recorders	Mr Matthew Barber, NHT Heritage	Pre-trial	QDA	55 463027 6126191	Open site	Valid	Artifact -	Permits
49-5-0209	Avonka Solar Farm IP12 Contact	Recorders	Mr Matthew Barber, NHT Heritage	Pre-trial	QDA	55 463129 6126100	Open site	Valid	Artifact -	Permits
49-5-0210	Avonka Solar Farm IP15 Contact	Recorders	Mr Matthew Barber, NHT Heritage	Pre-trial	QDA	55 463258 6125997	Open site	Valid	Artifact -	Permits
49-5-0211	Avonka Solar Farm IP10 Contact	Recorders	Mr Matthew Barber, NHT Heritage	Pre-trial	QDA	55 463088 6126001	Open site	Valid	Artifact -	Permits
49-5-0212	Avonka Solar Farm IP13 Contact	Recorders	Mr Matthew Barber, NHT Heritage	Pre-trial	QDA	55 463325 6126082	Open site	Valid	Artifact -	Permits
49-5-0213	Avonka Solar Farm IP16 Contact	Recorders	Mr Matthew Barber, NHT Heritage	Pre-trial	QDA	55 463521 6125615	Open site	Valid	Artifact -	Permits
49-5-0214	Avonka Solar Farm IP17 Contact	Recorders	Mr Matthew Barber, NHT Heritage	Pre-trial	QDA	55 463526 6125615	Open site	Valid	Artifact -	Permits
49-5-0031	Duck Bend BDLdong Contact	Recorders	Mr Matthew Barber, NHT Heritage	Pre-trial	AGD	55 465000 6150000	Open site	Valid	Conflict	Massacre
49-5-0023	Massacre Island Massacre Contact	Recorders	Ms Adrienne Snow-Heslop	Pre-trial	AGD	55 465050 6140300	Open site	Valid	Conflict	Massacre
49-5-0036	Restriction applied. Please contact ahims@environment.nsw.gov.au Contact	Recorders	Ms Adrienne Snow-Heslop	Pre-trial			Open site	Valid		Permits
49-5-0082	Dalrymple Contact	Recorders	Ms Adrienne Snow-Heslop	Pre-trial	QDA	55 471604 6147380	Open site	Destroyed	Baral -	Permits 4294

Report generated by AHIMS Web Service on 30/09/2019 for Alyce Cameron for the following search at Datum: QDA, Zone : 55, Eastings : 451755 - 472207, Northings : 6134985 - 6155465 with a Buffer of 0 meters. Additional info : Background, Number of Aboriginal sites and Aboriginal objects found is 105  
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7 August 2020

SiteID	SiteName	Datum	Zone	Eastings	Northings	Context	Site Status	SiteFeatures	SiteTypes	Reports
49-6-0034	SHT-1	AGD	55	465000	6152955	Open site	Valid	Modified Tree (Carved or Scarred) : 1		99034
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0035	SHT-2	AGD	55	465716	6152920	Open site	Valid	Modified Tree (Carved or Scarred) : 1		99034
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0241	Avonile Solar Farm IP6 5	GDA	55	462768	6137356	Open site	Valid	Artefact :-		
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0228	Avonile Solar Farm IP6 3	GDA	55	464622	6137571	Open site	Destroyed	Artefact :-		
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0229	Avonile Solar Farm IP6 2	GDA	55	464640	6137579	Open site	Destroyed	Artefact :-		
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0148	Avon 462462	GDA	55	462462	6137212	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0149	Avon 461353	GDA	55	461353	6137586	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0215	Avonile Solar Farm IP1 8	GDA	55	462229	6137021	Open site	Destroyed	Artefact :-		
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0216	Avonile Solar Farm IP1 9	GDA	55	462722	6137382	Open site	Destroyed	Artefact :-		
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0217	Avonile Solar Farm IP2 0	GDA	55	462715	6137416	Open site	Destroyed	Artefact :-		
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0218	Avonile Solar Farm IP2 1	GDA	55	461392	6137706	Open site	Destroyed	Artefact :-		
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0219	Avonile Solar Farm IP2 2	GDA	55	462061	6137541	Open site	Destroyed	Artefact :-		
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0220	Avonile Solar Farm IP2 3	GDA	55	462084	6137165	Open site	Destroyed	Artefact :-		
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0221	Avonile Solar Farm IP2 4	GDA	55	461294	6137064	Open site	Destroyed	Artefact :-		
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0184	Avonile Solar Farm IP4 8	GDA	55	462763	6137364	Open site	Destroyed	Artefact :-		
	<b>Contact</b>									
	<b>Recorders</b>									

Report generated by AHIMS Web Service on 07/08/2020 for Alyce Cameron for the following area at Datum : GDA, Zone : 55, Eastings : 453786 - 470202, Northings : 6137013 - 6153428 with a Buffer of 0 meters. Additional Info : Update background. Number of Aboriginal sites and Aboriginal objects found is 18

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

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SiteID	SiteName	Datum	Zone	Eastings	Northings	Context	Site Status	SiteFeatures	SiteTypes	Reports
49-6-0186	Avonile Solar Farm IP5 0	GDA	55	462160	6137766	Open site	Destroyed	Artefact :-		
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0031	Duck Bend Billabong	AGD	55	464500	6150000	Open site	Valid	Conflict :-	Massacre	
	<b>Contact</b>									
	<b>Recorders</b>									
49-6-0028	Massacre Island Massacre	AGD	55	465650	6148300	Open site	Valid	Conflict :-	Massacre	
	<b>Contact</b>									
	<b>Recorders</b>									

Report generated by AHIMS Web Service on 07/08/2020 for Alyce Cameron for the following area at Datum : GDA, Zone : 55, Eastings : 453786 - 470202, Northings : 6137013 - 6153428 with a Buffer of 0 meters. Additional Info : Update background. Number of Aboriginal sites and Aboriginal objects found is 18

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## **APPENDIX 3: ABORIGINAL HERITAGE: UNANTICIPATED FINDS PROTOCOL**

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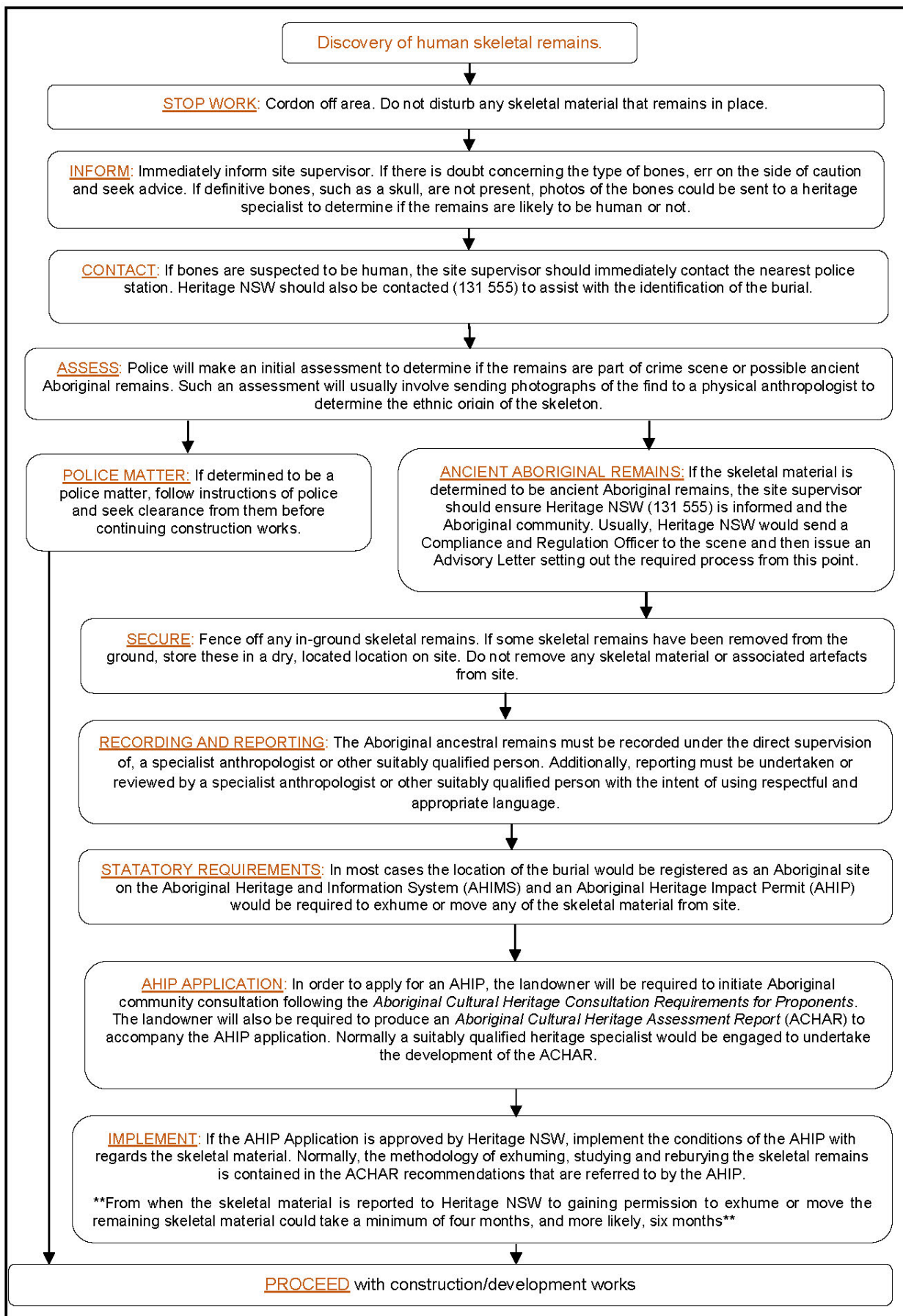
An Aboriginal artefact is anything which is the result of past Aboriginal activity. This includes stone (artefacts, rock engravings etc.), plant (culturally scarred trees) and animal (if showing signs of modification; i.e. smoothing, use). Human bone (skeletal) remains may also be uncovered while onsite.

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

Protocol to be followed in the event that previously unrecorded or unanticipated Aboriginal object(s) are encountered:

1. If any Aboriginal object is discovered and/or harmed in, or under the land, while undertaking the proposed development activities, the proponent must:
  - a. Not further harm the object;
  - b. Immediately cease all work at the particular location;
  - c. Secure the area so as to avoid further harm to the Aboriginal object;
  - d. Notify Heritage NSW as soon as practical on 131 555, providing any details of the Aboriginal object and its location; and
  - e. Not recommence any work at the particular location unless authorised in writing by Heritage NSW.
2. In the event that Aboriginal burials are unexpectedly encountered during the activity, work must stop immediately, the area secured to prevent unauthorised access and NSW Police and Heritage NSW contacted.
3. Cooperate with the appropriate authorities and relevant Aboriginal community representatives to facilitate:
  - a. The recording and assessment of the find(s);
  - b. The fulfilment of any legal constraints arising from the find(s), including complying with Heritage NSW directions; and
  - c. The development and implementation of appropriate management strategies, including consultation with stakeholders and the assessment of the significance of the find(s).
4. Where the find(s) are determined to be Aboriginal object(s), recommencement of work in the area of the find(s) can only occur in accordance with any consequential legal requirements and after gaining written approval from Heritage NSW (normally an Aboriginal Heritage Impact Permit).

## APPENDIX 4: UNANTICIPATED SKELETAL REMAINS PROTOCOL



**APPENDIX 5: ABORIGINAL HERITAGE: ARTEFACT IDENTIFICATION**

<p>Retouched blades (scale = 1cm)</p>	<p>Flakes</p>
<p>Microliths (scale = 1cm)</p>	<p>Scraper (scale = 1cm)</p>
<p>Flake characteristics (scale = 1cm)</p>	<p>Core from which flakes have been removed (scale = 1cm)</p>



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## APPENDIX 6: HISTORIC HERITAGE: UNANTICIPATED FINDS PROTOCOL

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A historic artefact is anything which is the result of past activity not related to the Aboriginal occupation of the area. This includes pottery, wood, glass and metal objects as well as the built remains of structures, sometimes heavily ruined.

Heritage significance of historic items is assessed by suitably qualified specialists who place the item or site in context and determine its role in aiding the community's understanding of the local area, or their wider role in being an exemplar of state or even national historic themes.

The following protocol should be followed if previously unrecorded or unanticipated historic objects are encountered:

1. All ground surface disturbance in the area of the finds should cease immediately, then:
  - a) The discoverer of the find(s) will notify machinery operators in the immediate vicinity of the find(s) so that work can be halted
  - b) The site supervisor will be informed of the find(s).
2. If finds are suspected to be human skeletal remains, then NSW Police must be contacted as a matter of priority.
3. If there is substantial doubt regarding the historic significance for the finds, then gain a qualified opinion from an archaeologist as soon as possible. This can circumvent proceeding further along the protocol for items which turn out not to be significant. If a quick opinion cannot be gained, or the identification is that the item is likely to be significant, then proceed to the next step.
4. Notify Heritage NSW as soon as practical on 131 555 providing any details of the historic find and its location.
5. If in the view of the heritage specialist or Heritage NSW that the finds appear not to be significant, work may recommence without further investigation. Keep a copy of all correspondence for future reference.
6. If in the view of the heritage specialist or Heritage NSW that the finds appear to be significant, facilitate the recording and assessment of the finds by a suitably qualified heritage specialist. Such a study should include the development of appropriate management strategies.
7. If the find(s) are determined to be significant historic items (i.e. of local or state significance), any re-commencement of ground surface disturbance may only resume following compliance with any legal requirements and gaining written approval from Heritage NSW.

## APPENDIX 7: LETTER FROM NSW ABORIGINAL LAND COUNCIL



*Wiradjuri Branch*  
*New South Wales Aboriginal Land Council*

153 Docker Street, Wagga Wagga 2650, P.O. Box 5515, Wagga Wagga 2650  
Telephone: (069) 21 6544 - 21 6339, Fax: (069) 21 7903

Peter Woods  
P.O. Box 225  
LEETON NSW 2705

Dear Peter

Further to our on site inspection and discussions at the Gravel Quarry Reserve No.843 adjacent to Portion 105, Parish of Gobbagaula, County of Mitchell, I now confirm in writing that no Aboriginal Sites are located in the proposed development area.

Upon our inspection it was noted that the proposed development area has already been heavily disturbed by previous quarrying, and that I have no objections for future quarrying to proceed.

As I mentioned to you I will bring this information to the attention of the members of the Narrandera Local Aboriginal Land Council at a meeting that will be held on 26 June as I am sure that we do not have any Native Title interests in the above area.

Please do not hesitate to contact me if you wish to discuss this matter further.

Yours sincerely

*RWilliams.*

Roland Williams  
SITES CURATOR  
17 June 1999