



Jacobs

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Project Manager: K Ivanusic
Author: A Lamond
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Jacobs Group (Australia) Pty Limited
ABN 37 001 024 095
Level 4, 12 Stewart Avenue
Newcastle West, NSW 2302
PO Box 2147
Dangar, NSW 2309
Australia
T +61 2 4979 2600
F +61 2 4979 2666
www.jacobs.com

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Executive Summary

Snowy Hydro Limited (Snowy Hydro) proposes to develop a gas fired power station near Kurri Kurri, NSW ('the Proposal'). Snowy Hydro is seeking approval for the Proposal from the NSW Minister for Planning and Public Spaces under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

As critical State Significant Infrastructure (CSSI) under the State Environmental Planning Policy (State and Regional Development) 2011 (SEPP SRD) the Proposal is subject to Part 5, Division 5.2 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Proposal requires the preparation of an environmental impact statement (EIS) in accordance with Secretary's Environmental Assessment Requirements (SEARs).

The Proposal Site is located in the small suburb of Loxford in the Hunter Valley region of New South Wales, approximately three kilometres (km) north of the town of Kurri Kurri, within the Cessnock local government area (LGA).

The main elements of the Proposal are as follows:

- Large industrial frame gas turbines (constructed on concrete foundations anchored by pilings to approximate depth of 17 m (subject to detailed design))
- A connecting electrical switchyard (constructed on concrete foundations)
- Storage tanks and other water management infrastructure
- Fire water storage and firefighting equipment such as hydrants and pumps
- Maintenance laydown areas
- Diesel fuel storage tank(s) and truck unloading facilities
- Site access roads and car parking
- Office/administration, amenities, workshop/storage areas and
- Sediment retention and stormwater basin (requiring excavation of an area of approximately 40 m by 70 m to a maximum depth of about 4 m).

This document presents the results of an assessment of Aboriginal cultural heritage within the Proposal Site. This Aboriginal cultural heritage assessment involved:

- Consultation with Aboriginal stakeholders (following the procedures outlined in DECCW 2010a) to obtain feedback on the assessment process and input on significance and cultural values associated with the Proposal Site
- An archaeological assessment including a desktop study and an archaeological survey
- Assessment of the potential impact to Aboriginal archaeological sites and
- Recommendation of management measures to prevent or mitigate impacts.

With the exception of the proposed switchyard location, the Proposal Site is a heavily disturbed former industrial site. Previous archaeological assessments in the vicinity of the Proposal Site have identified a large number of Aboriginal archaeological sites including artefact scatters, and potential archaeological deposits. However, none have been identified within the Proposal Site. These sites are often located near water sources, particularly on elevated landforms. The long post-contact history of development in the area has resulted in destruction or disturbance of Aboriginal archaeological material at a large number of sites. The Proposal Site is an example of this.

Archaeological surveys were carried out on 12 January 2021 and 11 February 2021. On-site consultation with nominated site officers from the Registered Aboriginal Parties (RAPs) enabled the development of recommendations for any further assessment. No Aboriginal archaeological sites are located within the Proposal Site. The potential for archaeological deposits at depth within the alluvium was identified.

The following mitigation action is recommended for the Proposal, to minimise impacts to cultural heritage:

- In the areas where the deep alluvium will be impacted through piling, it is proposed to undertake monitoring by an archaeologist and a representative of the RAPs. It is proposed to undertake monitoring of the piling works according to a methodology that includes recovery of Aboriginal objects if they are identified. If objects are present, the location would be recorded on AHIMS, in accordance with s89a of the *National Parks and Wildlife Act 1974*.
- In areas where the deep alluvium will be impacted by bulk excavation for both the turbine footings and sediment retention and stormwater basin, it is proposed to undertake monitoring by an archaeologist and a representative of the RAPs. If Aboriginal objects are identified through monitoring, bulk excavation would cease in the local area while hand excavation is undertaken to assess and recover objects. If objects are present, the location would be recorded on AHIMS, in accordance with s89a of the *National Parks and Wildlife Act 1974*.

The artefact assemblage would be temporarily stored and analysed. Long term management of those objects would be determined in consultation with the RAPs.

1. Introduction

1.1 Proposal background

Snowy Hydro Limited (Snowy Hydro) proposes to develop a gas fired power station near Kurri Kurri, NSW ('the Proposal'). Snowy Hydro is seeking approval for the Proposal from the NSW Minister for Planning and Public Spaces under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

The Proposal involves the construction and operation of an open cycle gas turbine power station and electrical switchyard, together with other associated infrastructure. The power station would have a capacity of up to approximately 750 megawatts (MW) which would be generated via two heavy duty open cycle gas turbines.

The Proposal's overall purpose and objective is to provide dispatchable capacity and other services to the National Electricity Market (NEM) which can be used by the Australian Energy Market Operator (AEMO) to meet the requirements of the NEM, and to supplement Snowy Hydro's generation portfolio with dispatchable capacity when the needs of electricity consumers are highest. Importantly, this type of power station provides firming of renewable generation projects' intermittent electricity supply to the NEM. Without associated dispatchable and firming generation, renewable generation projects would not be viable as an effective part of the energy generation technology mix.

The Proposal Site is located in the small suburb of Loxford in the Hunter Valley region of New South Wales, approximately three kilometres (km) north of the town of Kurri Kurri, within the Cessnock local government area (LGA).

1.2 Secretary's Environmental Assessment Requirements (SEARs)

An environmental impact statement (EIS) for the Proposal has been prepared under Division 5.2 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared to support the EIS. The purpose of this report is to address the relevant sections of the Secretary's Environmental Assessment Requirements (SEARs) issued on 5 February 2021 (SSI 12590060). The report preparation has also taken cognisance of any applicable agency comments. Table 1.1 outlines the SEARs relevant to this assessment.

Table 1.1: SEARs relevant to this assessment

Secretary's Requirement
Heritage – including an assessment of the likely Aboriginal impacts of the project in accordance with the <i>Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales</i> (DECCW, 2010), including adequate consultation with Aboriginal stakeholders having regard to the <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents</i> (OEH, 2010).

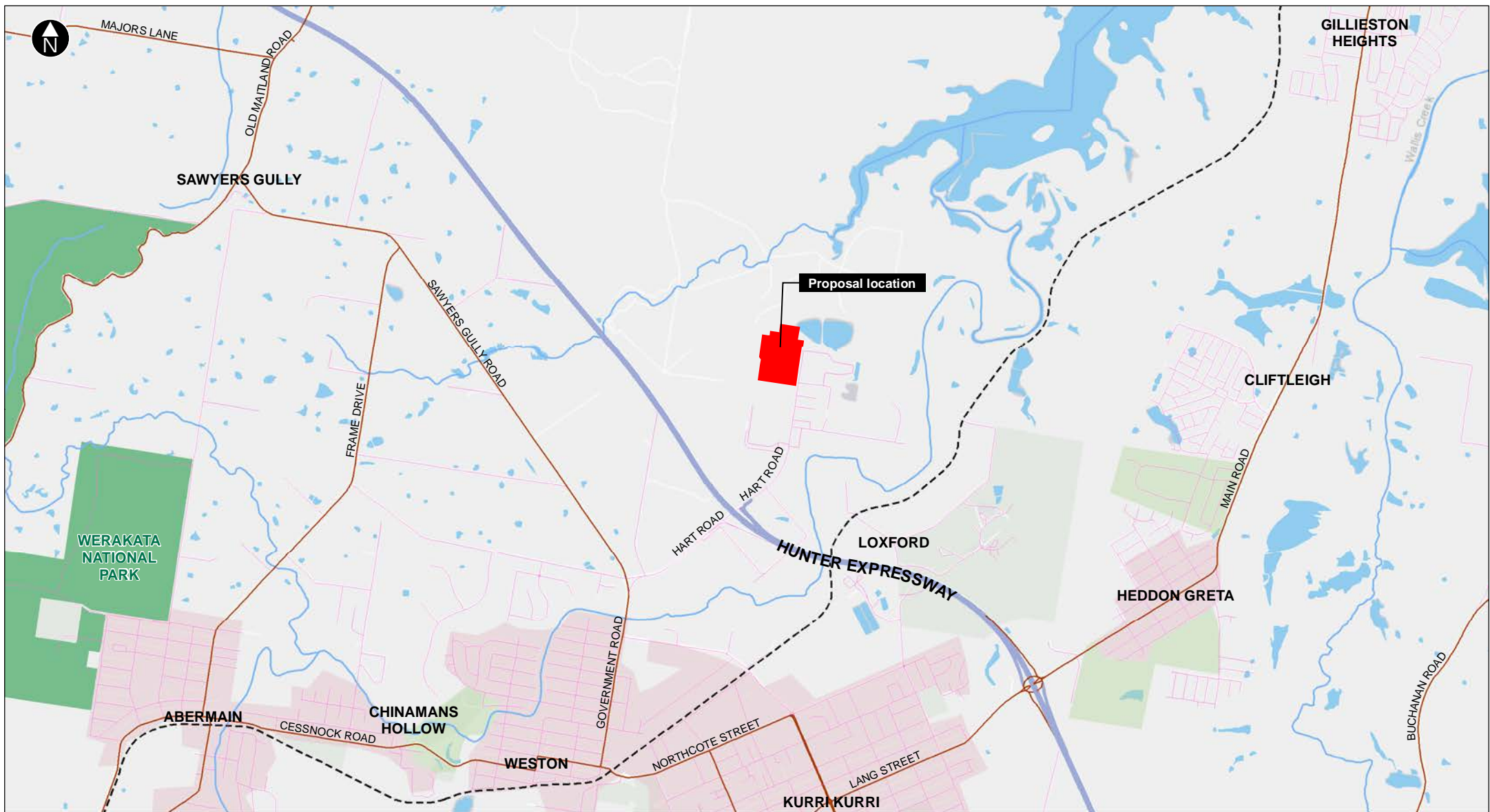
1.3 Proposal location

The Proposal Site is located in the small suburb of Loxford in the Hunter Valley region of New South Wales, approximately three km north of the town of Kurri Kurri, approximately 30 km north west of Newcastle CBD and 125 km north of Sydney. The Proposal Site is located within the Cessnock City Council LGA.

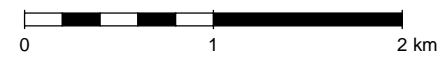
The Proposal Site is located at the site of the former Kurri Kurri aluminium smelter, which is owned by Hydro Aluminium Kurri Kurri Pty Ltd (Hydro Aluminium), which operated from 1969 to 2012 and was closed in 2014. Since the closure of the Kurri Kurri aluminium smelter, extensive remediation works have taken place at the site, including Stage 1 of a two-stage demolition program of existing structures, asbestos removal and recycling of waste materials. The demolition and remediation works have included excavation and removal of concrete foundations and other elements of the former aluminium smelter, some of which had been originally constructed below ground level. The demolition and remediation works have therefore resulted in further disturbance to the Proposal Site.

The Proposal Site can be seen in more detail in Figure 1.1 below.

The area surrounding the Proposal Site contains many previously recorded Aboriginal sites. The results of the archaeological assessment of the Proposal Site are provided in Section 7 and Appendix B.



- | | | |
|--|--|--|
| Proposal location | Urban areas | Motorway |
| National Parks and Wildlife Services estate / reserve | Waterbodies | Main roads |
| Recreation areas | | Roads |
| | | Railway |



1:40,000 at A4
Coordinate System: GDA2020 MGA Zone 56

Data sources:
Jacobs
NSW Spatial Services

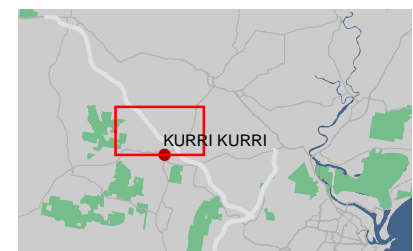


Figure 1-1 Proposal location (regional)

1.4 Report structure

The report structure is as follows:

- Section 2 describes the Proposal including works that would involve ground disturbance and consequently could pose a risk to Aboriginal objects and sites
- Section 3 outlines the legislative and policy framework relevant to the investigation and assessment of Aboriginal heritage in New South Wales
- Section 4 presents an overview of consultation undertaken with the Aboriginal community in relation to the Proposal. Consultation was carried out in accordance with the *Aboriginal Cultural Heritage Requirements for Proponents (DECCW 2010a)*
- Section 5 presents a review of ethnographic information relevant to the Proposal
- Section 6 presents a summary of the identified Aboriginal cultural values associated with the Proposal Site
- Section 7 summarises the archaeological assessment and the Aboriginal archaeological sites and other areas of archaeological sensitivity the assessment has identified in the Proposal Site. This summary draws upon supporting data presented in the Archaeological Assessment Report (AAR; Appendix B)
- Section 8 assesses the heritage significance using the NSW heritage significance criteria
- Section 9 assesses the Proposal's direct and indirect impact on Aboriginal sites and the significance of these impacts to the area's Aboriginal cultural heritage resource
- Section 10 presents recommended management and mitigation measures for the Proposal.

2. Proposal description

2.1 Proposal overview

The power station is proposed to comprise two heavy-duty Open Cycle Gas Turbines (OCGT). The gas turbines are expected to operate on natural gas fuel for the majority of the time in operation, however the turbines will be capable of operating on diesel fuel as necessary and this functionality would be incorporated into the Proposal. Operation on diesel fuel is considered a 'back-up' function in the case that gas supply to the Proposal Site is not available.

The major supporting infrastructure required, which is part of the Proposal, will be a new 132 kV electrical switchyard. Potable water, wastewater, access roads and stormwater connections will be required, and will be provided to the Proposal Site boundary. Power and other services will also be required during the construction phase of the Proposal.

The main elements of the Proposal are as follows:

- Large industrial frame gas turbines (constructed on concrete foundations anchored by pilings to approximate depth of 17m (subject to detailed design))
- A connecting electrical switchyard (constructed on concrete foundations)
- Storage tanks and other water management infrastructure
- Fire water storage and firefighting equipment such as hydrants and pumps
- Maintenance laydown areas
- Diesel fuel storage tank(s) and truck unloading facilities
- Site access roads and car parking
- Office/administration, amenities, workshop/storage areas
- Sediment retention and stormwater basin (requiring excavation of an area of approximately 40m by 70m to a maximum depth of about 4m).

For gas operation, the Proposal would require connection to a new gas lateral and storage pipeline, which would connect into the existing Sydney to Newcastle Jemena Gas Networks (JGN) Northern Trunk gas transmission pipeline, with the tie in point to be located within the proximity of the Newcastle area. This new gas lateral would be developed, constructed and operated separately to this Proposal (by others) but would be required for the power station to operate. The gas lateral would be subject to a separate environmental assessment and planning approvals process, and is not part of this Proposal, and is not investigated or assessed in this report.

3. Legislative and policy framework

3.1 Aboriginal cultural heritage legislation

The protection of Aboriginal cultural heritage in NSW is governed by a set of interrelated local, state and Commonwealth legislation and planning instruments. These Acts and their relevant sections and associated regulatory documents (e.g. codes of practice, guidelines, etc.) that govern the Proposal are described in Table 3.1.

Table 3.1: Legislative framework for Aboriginal cultural heritage

Reference	Requirements
Aboriginal and Torres Strait Islander Heritage Protection Act 1984	Protects Aboriginal cultural property in a wider sense and includes any places, objects and folklore that 'are of particular significance to Aboriginals in accordance with Aboriginal tradition'. The Act may apply to contemporary Aboriginal cultural property as well as ancient sites. The responsible Minister may make a declaration under s10 of the Act in situations where state or territory laws do not provide adequate protection of heritage places.
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	<p>The <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) provides for the protection of the environment, especially in matters of national environmental significance (MNES). Under the EPBC Act, a person must not take an action that has, will have, or is likely to have a significant impact on any of the MNES without approval from the Australian Government Environment Minister. The definition of the environment under the EPBC Act includes both natural and cultural elements.</p> <p>The EPBC Act includes provisions to protect matters of national environmental significance and Commonwealth land. Lists and registers made under the Act include:</p> <ul style="list-style-type: none"> ▪ A National Heritage List (NHL) of places of national heritage significance ▪ A Commonwealth Heritage List (CHL) of heritage places owned or managed by the Commonwealth ▪ An independent expert body, the Australian Heritage Council, which advises the Minister on the listing and protection of heritage places.
Native Title Act 1993	<p>Recognises and protects native title and provides that native title cannot be extinguished contrary to the <i>Native Title Act 1993</i>. The National Native Title Tribunal (NNTT) is a Commonwealth Government agency set up under this Act and mediates native title claims under the direction of the Federal Court of Australia. NNTT maintains the following registers:</p> <ul style="list-style-type: none"> ▪ National Native Title Register ▪ Register of Native Title Claim ▪ Unregistered claimant applications ▪ Register of Indigenous Land Use Agreements (ILUAs). <p>The Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 stipulates that where relevant, consultation must be conducted with native title holders or registered native title claimants in accordance with the <i>Native Title Act 1993</i>.</p>

Reference	Requirements
Environmental Planning & Assessment Act 1979 (EP&A Act)	<p>This legislation provides the framework for environmental planning and assessment in NSW. The EP&A Act includes the requirement for environmental impacts to be considered prior to development approval including:</p> <ul style="list-style-type: none"> ▪ The requirement for impacts or likely impacts upon Aboriginal cultural heritage to be assessed as part of a project's environmental approval ▪ Local government areas prepare Local Environment Plans (LEPs) and Development Control Plans (DCPs) in accordance with the EP&A Act to provide guidance on the level of environmental assessment required ▪ Division 5.2 of the Act applies to Critical State Significant Infrastructure (CSSI) and guides the application of the <i>National Parks and Wildlife Act 1974</i> in relation to assessment and secondary approvals required CSS1 projects.
National Parks and Wildlife Act 1974 (NPW Act)	<p>The NPW Act provides for the protection of Aboriginal objects and Aboriginal places. Under section 5 of the Act, an Aboriginal object is defined as:</p> <p><i>'any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains.'</i></p> <p>An Aboriginal place is defined under the NPW Act as an area that has been declared by the Minister administering the NPW Act as a place of special significance for Aboriginal culture. It may or may not contain physical Aboriginal objects.</p> <p>Under s86 of the NPW Act it is an offence to harm an Aboriginal object or harm or desecrate an Aboriginal place, without the prior written consent from the Secretary of the Department of Planning, Industry and Environment (DPIE). Penalties apply to the offence of impacting on an Aboriginal object or Aboriginal place. The largest penalties apply when a person harms an object that they know to be an Aboriginal object (called a 'knowing offence'). However, a 'strict liability' offence still applies whether or not a person knows it is an Aboriginal object or place. Section 4.7 of the EP&A Act identifies that consent under s86 of the NPW Act (an Aboriginal Heritage Impact Permit (AHIP)) is not required for CSSI projects.</p> <p>Under s89A of the NPW Act it is a requirement to notify the DPIE Secretary of the location of an Aboriginal object. Identified Aboriginal objects and sites are registered in NSW on the Aboriginal Heritage Information Management System (AHIMS).</p> <p>Procedures that accompany the <i>National Parks and Wildlife Amendment Act 2010</i> include the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW 2010c), the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010a) and the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW 2010b).</p>

Reference	Requirements
Aboriginal Cultural Heritage Consultation Requirements for Proponents (ACHCRP) 2010	<p>The ACHCRP establishes the requirements for consultation (under part 6 of the NPW Act) with Aboriginal stakeholders as part of the heritage assessment process to determine potential impacts of proposed activities on Aboriginal objects and places. The report comprises four stages with associated timeframes which must be adhered to:</p> <ul style="list-style-type: none"> ▪ Stage 1 – Notification of project proposal and registration of interest (14 days from date letter sent to register as a registered Aboriginal stakeholders) ▪ Stage 2 – Presentation of information about the proposed project (set up Aboriginal Focus Group (AFG) meetings, prepare info etc) ▪ Stage 3 – Gathering information about cultural significance (28 days for registered Aboriginal stakeholders to provide a review and feedback to consultants' methodology); and ▪ Stage 4 – Review of draft cultural heritage assessment report (registered Aboriginal stakeholders have 28 days from sending of the report to make a submissions).
Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (the Code of Practice)	<p>The Code of Practice sets out the detailed requirements for archaeological investigations of Aboriginal objects in NSW for activities that require assessment under Part 4 or Part 5 of the EP&A Act. An AHIP or Secretary's Environmental Assessment Requirements (SEARs) to undertake sub-surface testing are not required if complying with this Code, as sub-surface testing complying with this Code is excluded from the definition of harm to an Aboriginal object. The Code of Practice sets out in detail:</p> <ul style="list-style-type: none"> ▪ Minimum qualifications for anyone undertaking archaeological investigation under the Code in NSW ▪ Assessment steps required to be undertaken for all archaeological investigation ▪ Assessment steps that may be required to be undertaken to adequately characterise the Aboriginal objects being investigated.
Native Title Act (NSW) 1994	<p>The Native Title Act (NSW) 1994 was introduced to ensure that the laws of NSW are consistent with the Commonwealth <i>Native Title Act 1993</i>.</p> <p>The Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 stipulates that where relevant, consultation must be conducted with Native title holders or registered native title claimants in accordance with the NSW <i>Native Title Act (NSW) 1994</i>.</p>
Aboriginal Land Rights Act (NSW) 1983	<p>The <i>Aboriginal Land Rights Act (NSW) 1983</i> recognises the rights of Aboriginal people in NSW and provides a vehicle for the expression of self-determination and self-governance. The purposes of the Act are:</p> <ul style="list-style-type: none"> ▪ to provide land rights for Aboriginal persons in NSW ▪ to provide for representative Local Aboriginal Land Councils (LALCs) in NSW ▪ to vest land in those LALCs ▪ to provide for the acquisition of land, and the management of land and other assets and investments, by or for those LALCs and the allocation of funds to and by those LALCs ▪ to provide for the provision of community benefit schemes by or on behalf of those LALCs.

4. Aboriginal community consultation

The *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010a) establishes the requirements for consultation with Aboriginal stakeholders as part of the heritage assessment process to determine potential impacts of proposed activities on Aboriginal objects and places. These requirements include four stages with associated timeframes which must be adhered to:

Stage 1 – Notification of proposal and registration of interest (14 days from date letter sent to register as registered Aboriginal stakeholders).

Stage 2 – Presentation of information about the Proposal.

Stage 3 – Gathering information about cultural significance (28 days for registered Aboriginal stakeholders to provide a review and feedback to consultants regarding the methodology).

Stage 4 – Review of draft cultural heritage assessment report (registered Aboriginal stakeholders have 28 days from sending of the report to make a submission).

Aboriginal stakeholder engagement and involvement is important for the identification of Aboriginal cultural values relevant to the Proposal. This section summarises the consultation process relating to the organisation and conduct of the ACHAR. Details of consultation including meeting minutes, examples of letters sent to RAPs and knowledge holders, conversations undertaken during archaeological survey, native title search results, records of cultural heritage values interviews and a detailed consultation log are included in Appendix A.

This section summarises the consultation process throughout the archaeological assessment to date (Table 4.1) and outlines the stages of consultation.

Table 4.1: Summary of consultation process

Task Name	Start	Finish
Stage 1 – Agency Letters	November 2, 2020	November 18, 2020
Stage 1 – Newspaper advertisements	November 9, 2020	December 2, 2020
Stage 1 – Proposal Notification and invitation to register supplied to potential Aboriginal stakeholders	November 10, 2020	November 25, 2020
Stage 1 – Supply of the list of RAPs to Heritage NSW and Mindaribba LALC	December 8, 2020	December 8, 2020
Stage 2 and 3 – RAP review of proposal information and methodology and request for information about cultural significance	November 27, 2020	January 4, 2021
Stage 4 – Carry out archaeological survey and prepare a draft ACHAR	January 4, 2021	January 15, 2021
Stage 4 – Present the draft ACHAR to RAPs for review and comment	February 15, 2021	March 15, 2021

4.1 Stage 1 – Notification of proposal and registration of interest

Stage 1 of the consultation process is to identify, notify and register any Aboriginal people or groups who hold cultural knowledge relevant to determining the cultural significance of Aboriginal objects and/or places in the vicinity of the Proposal Site.

Notification was initiated on 2 November 2020 to all relevant organisations listed under section 4.1.2 in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010a). These organisations are listed below in Table 4.2.

Table 4.2: List of contacted organisations (stage 1 consultation)

Name of Organisation	Date of Notification Sent	Response Received
Mindaribba Local Aboriginal Land Council	2 November 2020	No response
Native Title Services Corp	2 November 2020	No response
Office of Environment and Heritage – Hunter office	2 November 2020	Provided list of organisations to contact; November 11, 2020
Office of the Registrar, Aboriginal Land Rights Act 1983	2 November 2020	Provided contact details for Mindaribba; LALC November 3, 2020
Cessnock Council	2 November 2020	Provided contact details for Mindaribba LALC, Barkuma Neighbourhood Centre, Kiray Putjung Aboriginal Corporation and Wonnarua Elders Council; November 4, 2020.
Hunter Local Land Services	2 November 2020	No response

In accordance with Section 4.1.3 (DECCW 2010a) a notice in the local newspaper circulating in the general location of the Proposal Site must be completed, with information explaining the Proposal and its exact location. Notices were placed in the Koori Mail and Newcastle Herald. These advertisements provided additional opportunity for Aboriginal people who are interested in the Proposal to register. A copy of the advertisement is included in Appendix A.

Proposal notifications were sent to all groups and individuals identified as a result of the above consultation process. A total of 22 groups and individuals registered their interest:

- A1 Indigenous Service
- AGA Services
- Cacatua Culture Consultants
- Didge Ngunawal Clan
- DFTV Enterprises
- Divine Diggers Aboriginal Cultural Consultants
- Gunjeewong
- Lower Hunter Aboriginal Incorporated
- Kawul Pty Ltd trading as Wonn1 Sites
- Merrigarn
- Mindaribba Local Aboriginal Land Council

- Muragardi
- Murra Bidgee Muilangari Aboriginal Corporation
- Steven Talbott
- Ungooroo Aboriginal Corporation
- Wattaka Wonnarua CC Service
- Widescope Indigenous Group
- Wonnarua Elders Council
- Yarrawalk (A division of Tocomwall Pty Ltd)
- Wonnarua Nation Aboriginal Corporation
- Awabakal Traditional Owners Aboriginal Corporation.

Following Section 4.1.6 of Stage 1 of the Consultation Requirements (DECCW 2010a), a list of RAPs for the Proposal and copies of the notifications from Section 4.1.3 were submitted to Heritage NSW and Mindaribba Local Aboriginal Land Council on 8 December 2020.

A copy of the notification is provided in Appendix A.

4.2 Stage 2 – Presentation of information about the Proposal and a draft methodology for review

Stage 2 of the consultation process provides RAPs with information about the scope of the Proposal and the proposed cultural heritage assessment process.

The RAPs were provided with a letter outlining the Proposal and a copy of the draft methodology (please refer to Appendix A). Comments on this document were invited from RAPs and they were invited to contact Jacobs at any time throughout the assessment process to discuss the Proposal.

All RAPs were offered the opportunity to provide Site Officers for the archaeological survey and were issued a checklist to ensure safety and preparedness for work. A survey of the Proposal Site and a discussion regarding the Proposal was undertaken on the 12 January 2021 and 11 February 2021.

4.3 Stage 3 – Gathering information about cultural significance

Stage 3 of the consultation process is to facilitate a process whereby RAPs can contribute to culturally appropriate information gathering and the research methodology, provide information that will enable the cultural significance of Aboriginal objects and/or places in the Proposal Site to be determined, and have input into the development of any cultural heritage management options.

RAPs were invited to submit information relevant to the cultural significance of the Proposal Site and any areas and objects within it, at all stages of the consultation process.

4.4 Stage 4 – Review of draft ACHAR

Stage 4 of the consultation process involves the RAPs' review and feedback on the draft ACHAR. The ACHAR was drafted to document the assessment process.

The draft ACHAR was sent to all RAPs on 15 February 2021, so that they could review the document and supply comments and feedback. The ACHAR has been updated to incorporate the input from all RAPs at the close of the review period, which ended on 15 March 2021.

All submissions provided by RAPS are included in Appendix A (following section 4.4 of DECCW 2010a).

4.5 Sensitive cultural information and management protocol

It is possible that during the consultation process, RAPS will provide sensitive cultural information to which access needs to be restricted.

In the event that such information is supplied, the RAP supplying the information should state to Jacobs how they wish that information to be treated, and how access to the information should be restricted.

Jacobs will follow the stated wishes provided by the RAP group in question when managing and using the information provided. All stated restrictions of access, communication and publication of the information will be followed. These might include:

- Restrictions on reproducing the information (in whole or in part) in reports
- Restrictions on reproducing the information in reports provided to different audiences (for example, the version provided to the client, the version provided to DPIE and the AHIMS database)
- Restrictions on communication of the information in other ways
- Restrictions on the location/storage of the information
- Other required processes relating to handling the information
- Any names and contact details of persons authorised within the relevant Aboriginal group to make decisions concerning the information, and their degree of authorisation
- Any details of any consent given in accordance with customary law
- Any restrictions on access to and use of the information by RAPS.

The above list should be considered when providing a statement of requirements regarding any culturally sensitive information.

4.6 Consultation log

A log summarising the consultation carried out with RAPS in relation to the Proposal to date is provided in Appendix A. Table 4.3 below details specific submissions and comments by RAPS throughout the assessment process and responses in accordance with the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (DECCW 2011).

Table 4.3: Summary of RAP submissions and comments

Registered Aboriginal Party	Submission/Comment	Response
Laurie Perry (Wonnarua Nation Aboriginal Corporation)	During the site visit meeting (12/01/2021) Laurie highlighted the need for the Proposal to have Aboriginal participation in construction jobs and some form of cultural offset. Perhaps in the form of funding for health, education or employment projects. It was suggested that Snowy Hydro should develop a reconciliation action plan.	<p>Snowy Hydro is a partner of the Clontarf Foundation, an organisation whose purpose is to assist young Aboriginal and Torres Strait Islander men across Australia in education, life skills, self-esteem and ultimately bettering their employment prospects.</p> <p>The Proposal Site is a heavily disturbed former industrial site. Given the low likelihood of the Proposal resulting in impacts on Aboriginal material or cultural heritage, it is considered that a cultural offset would not be commensurate with the predicted level of impact.</p> <p>Snowy Hydro are committed to responsible heritage management and a representative of the RAPs would be engaged to assist with monitoring of piling and deeper bulk excavation works.</p>
Multiple RAPs	During the site visit meeting (12/01/2021) the possibility of monitoring the piling locations within the alluvium deposits, as they cannot be test excavated.	The monitoring of piling is included in the recommendations of the report (refer to Section 10).
Steven Talbott	During the site visit meeting (12/01/2021) Steven recommended the monitoring of Geotechnical investigation locations. Steven also recommended a walkover and potential collection of artefacts in the northern portion of the Proposal Site post vegetation clearance.	<p>This is a level of monitoring that is not justified in the circumstances. The ground surface across the Proposal Site (including areas of vegetation regrowth) has been subject to prior disturbance.</p> <p>Further, the geotechnical investigations are not the subject of this assessment. Jacobs (on behalf of Snowy Hydro) has undertaken a separate due diligence assessment, in accordance with the Code of Practice, in respect of the geotechnical investigations. The findings of the due diligence assessment are aligned with the findings of this ACHAR.</p>
Kerrie Brauer (Awabakal Traditional Owners Aboriginal Corporation)	<p>Provided a statement of significance for the area (included in section 6.3).</p> <p>They identified that they wish to be a part of any development of a Reconciliation Action Plan by Snowy Hydro.</p> <p>Requested that Cultural heritage awareness training be provided for all personnel involved in the project.</p>	<p>Snowy Hydro is considering all recommendations with regards to the development of a reconciliation action plan.</p> <p>Cultural heritage awareness training would be included in inductions for the project.</p>
Alan Paget (Ungooroo Aboriginal Corporation)	No issues with the content of the report	

Registered Aboriginal Party	Submission/Comment	Response
Arthur Fletcher (Wonn1 Sites)	Support the recommendations of the report.	
Steven Hickey (Widescope Indigenous Group)	Support the recommendations of the report.	
Cacatua General Services	Support the recommendations of the report.	
AGA Services	Support the recommendations of the report.	

5. Ethnohistorical information

5.1 Aboriginal people of the Upper Hunter Valley area

Ethnographic information which relates to the Aboriginal occupation of the Proposal Site and its surrounding area is derived from publications and other surviving forms of documentation which were compiled by early non-Aboriginal explorers, settlers, missionaries and government officials who went to the region during the mid to late 19th century. Unfortunately, within the ethnographic record, early researchers sometimes referred to tribes as having as few as 10 members, to as many as 500, which makes the determination of social organisation within certain groups difficult.

It should be noted that the information provided here does not necessarily reflect the opinions of the Aboriginal knowledge holders for the Proposal regarding their tribal affiliations and boundaries. The following information was compiled from a number of written sources based on language research and ethno-historic observations.

5.2 Aboriginal tribal boundaries

According to Tindale (1974) in relation to Australian Aboriginal people, the term 'tribe' describes a group of people that share a common language. Tindale (1974) describes Aboriginal tribal boundaries as the limits beyond which it is dangerous to move without adequate recognition, while Stanner (1965) argues that a tribe's territory is the sum of its constituent clan estates. According to the tribal boundaries as defined by Tindale (1974) the Proposal Site traverses the traditional lands of the Awabakal people to those of the Wonnarua. Tindale (1974) defines the territory of the Wonnarua as the Upper Hunter River from a few miles above Maitland west to the Dividing Range. The southern boundary with the Darkinjung is on the divide north of Wollombi.

Historical records from the 19th century are severely limited by disruptions prior to the first ethno-historical observations and the lack of anthropological expertise from the observers. It should be noted, however, that the identification of names and boundaries of tribal groups in the Hunter regions remains unclear and may never be resolved. More recent attempts to delineate the grammar of languages in the Hunter and Lake Macquarie region, however, have indicated that indeed there was a degree of bilingualism and shared lexicon amongst the tribes in the district (Lissarrague 2006).

5.3 Social Organisation, Settlement and Subsistence

Ward (2015) describes Aboriginal society as being comprised of a hierarchy of organisational levels and groups with fluid boundaries between them. The smallest group in the hierarchy is the family comprised of a man with one or more wives, their children and some of their parents. The second level of the hierarchy consisted of bands, small groups consisting of members of several nuclear families who conduct hunting and gathering tasks together for most of the year. The third level of the hierarchy consists of regional networks or clans which comprise a number of bands. Members of these regional networks usually share beliefs in a common language dialect and assemble for specific ceremonies. The tribe is the next highest unit which is recognised as a linguistic unit with flexible territorial boundaries. The highest level of the hierarchy is the 'cultural area', which consists of groups who share certain cultural characteristics, such as initiation ceremonies and closely related languages.

The main subsistence strategy employed by Aboriginal people in the Hunter region focused on a hunter-gatherer lifestyle. In general, males undertook hunting activities, while women gathered smaller faunal and plant resources (Dyall 1971). The most basic unit in Aboriginal society was a 'band' that consisted of a collection of families, who grouped together for subsistence (Habermann 2003). Land ownership resided with the larger 'clan' or descendent group, of which the bands formed a part (Habermann 2003).

Single men were said to have lived separately to married men, single women and children. A single male entering a married man's camp without invitation would be met with violence. Campsites were thought to be on the banks of rivers:

'In choosing the site [for their camps], proximity to fresh water was one essential, some food supply a second, whilst a vantage ground in case of attack from an enemy was a third.' (Fawcett 1898, cited in Habermann 2003).

Kinship was an integral part of Aboriginal society, and created complex relationships between individuals, which governed the foods people consumed, their social and environmental interactions and the land they used. The kinship network extended social links beyond the band and even the language territory, resulting in economic ties outside the core group. As such, other territories could be visited; social gatherings promoted and maintained these extended rights and ties. Inter-clan and inter-tribal participation was also known to occur for ceremonies, such as initiation rites (Habermann 2003), and trade was a physical expression of these inter-tribal and clan networks (Habermann 2003).

5.3.1 Resources

The traditional use of resources for the Hunter region was perhaps best described in ethnographical terms by Threlkeld at Lake Macquarie. Whereas this is some distance from the Proposal Site traversing the Upper Hunter it does comprehensively describe the variety of the diet available to people at the time. At his mission, Threlkeld (cited in Gunson 1974) noted that Aboriginal people ate a variety of different fauna and flora. Threlkeld observed that people used the resources year round, eating certain species when they were available, such as wild plums, cobra (maggots from grass trees), snakes, cockles, lizards, fish, flying-foxes, ducks, pigeons, kangaroo, possum, swans, wallaby, kangaroo rat, eels, craw-fish, geese, oysters, honey and goanna (Threlkeld cited in Dillion 1989; Gunson 1974; Neal and Stock 1986). Even whale was consumed when stranded on the beaches and was feasted on by all Aboriginal people within reasonable travelling distance (Threlkeld cited in Dillion 1989; Gunson 1974; Thomas 2008).

Hunting practices, such as beating grasslands with waddies to flush out bandicoots, and the trapping of kangaroos through the use of fire, were also recorded (Gunson 1974). Men hunted for possum while women climbed trees in search of honey (Dillion 1989). Sometimes, a worker bee would be caught and a tuft of down attached to it, so it could be tracked to its hive (Scott cited in DEDJTR 2015). In addition, women would dive for lobster among the rocks, and would fish with lines, while men used spears. Fishing was such an important role for women, that a mother would select a female child and appoint her in the same role; this was signified by amputating the little finger on her right hand (Dawson cited in DEDJTR 2015; Threlkeld cited in Gunson 1974). Cooking was said to have been done exclusively by men (Dillion 1989). Fish was usually consumed after being cooked, with fires kept alight on canoes during angling (Dillion 1989; Thomas 2008). Threlkeld noted that:

'Their mode of fishing is curious, sometimes angling with hook and line thrown by the hand as they are seated in the bark canoe, sometimes diving for shell fish, sometimes standing in their frail bark darting their spears into the fish as they pass, or at other times, using hand nets forming a circle in shallow waters and enclosing the fish, but the most curious method is that of planting sprigs of bushes in a zig-zag form across the streams leaving an interval at the point of every angle where the men stand with their nets to catch what others frighten towards them by splashing in water.' (Gunson 1974: 30).

Plant resources such as ferns, potentially Bracken Fern (*Pteridium esculentum*) or Swamp Fern (*Blechnum* spp.) were crushed or sometimes roasted, before being ground to produce a flour for bread making (Threlkeld cited in Gunson 1974; Habermann 2003; Thomas 2008). Bracken Ferns comprise an edible starchy rhizome, and are available from late summer to autumn (Thomas 2008). According to Scott (2015) however, Aboriginal people had ceased eating ferns in preference for the root of the Gigantic Lily (*Doryanthus excelsa*), although this had to be soaked (Scott cited in DEDJTR 2015). The consumption of Macrozamia nuts was also noted, but due to their toxic nature, had to be soaked for two to three weeks prior to being consumed (Murphy and Morris 2013; Thomas 2008). The Macrozamia seeds or nuts were also roasted prior to consumption (Murphy and Morris 2013;

Thomas 2008). It is also possible that Kangaroo Grass seeds were ground and eaten, although there is no direct ethnographic evidence to support this (Thomas 2008).

The Hunter people were great proponents of fire farming, which altered the landscape (Dillion 1989). 'Fire-stick farming' resulted in both long and short term gain, with cleared areas exposing the burrows and nests of prey, and in the long term, created breaks in forest cover, attracting herbivores (Dillion 1989).

Brayshaw (1987:21) describes the use of fire carried out one month prior to a hunt to attract game to the new (Kuskie 1997). Sokoloff notes fire was also used in burials, for fishing, and farming (Sokoloff 1978a:73; 1978b:125).

5.3.2 Material culture

The majority of the Hunter Valleys material culture (shields, spears, boomerangs, clubs, digging sticks, canoes, containers, shelters, and woven nets and bags) were made from wood or other vegetative material that is rarely preserved in the archaeological record. Generally, artefacts crafted from shell, bone or stone are preserved for future generations to record.

5.3.2.1 Bark and wood implements

Aboriginal people were recorded within the Hunter region as utilising a variety of bark and wood resources. Bark and wood was harvested from a variety of Stringybark species (Stringybark, White Stringybark, and Thin-leaved Stringybark), Tea-Tree (*Melaleuca quinquenervia*), Grass Trees (*Xanthorrhoea australis*), Cabbage-tree (*Livistona australis*), River Gum, Kurrajong (*Brachychiton populneus*), Iron Bark (*Eucalyptus crebra* or *E paniculata*) and Swamp Mahogany (*Eucalyptus robusta*) (Dillion 1989; Neal and Stock 1986). The extraction of bark from the Nettle Tree (*Urticaceae*) and the Giant Fig Tree (*Ficus* sp.) was also recorded for use in shield making (Threlkeld cited in Gunson 1974). Bark and timber were used to make canoes; spears, clubs, and shelter, among many other items were crafted from bark and timber resources. They were also used in burial practices (Neal and Stock 1986).

Up to four different types of spears have been recorded for the region, and these could be thrown up to a distance of about 36 m (Dawson 1830 cited in Thomas 2008). Spears were crafted from the stem of Grass Trees. The fish spear – the 'Kul-là-ra' and 'Mo-ting' – was approximately 1.8 m in length, with four pieces of hardwood at the base, which added around an extra 0.6 m to the length. The hardwood pieces were fastened with bark-thread covered with Grass Tree gum, and held apart through small wedges, also smeared with gum. The wooden points were fire hardened, and had gum-fastened bone barbs at the tips. The hunting spear, or the 'wa-rai', had one hardened joint of wood at the base. The battle spear was also constructed similarly, although it had pieces of quartz stuck along one side of the wooden joint, which were likened to the teeth of a saw. Following European settlement, glass was substituted for quartz (Threlkeld and Browne cited in Gunson 1974; Thomas 2008). Spears were thrown using a 'wom-mur-rur', which was tapered at the end where the barb was fixed, and were around 1.2 m in length and half an inch thick. Spears were traded for possum skin cloaks and 'hanks of line, spun by hand from the fur of animals of the opossum tribe' further inland (Threlkeld cited in Gunson 1974; Thomas 2008).

Canoes were observed at Maitland (Threlkeld cited in Gunson 1974; Heritage Alliance 2008; Thomas 2008), and described as being from around 1.2 m up to 4.3 m in length and 0.9 to 1.2 m wide (Threlkeld cited in Gunson 1974; Barrallier 1802 cited in Heritage Alliance 2008). Three types of canoe have been recorded, one made from a strong strip of gum bark, which was scraped and fire hardened. The second type was made from bark that was closed and pointed at both ends, sometimes kept taut by wedges, with the third type ('mooten'), crafted from fire. A log would be selected that was still aflame, and Aboriginals would control the fire to form a canoe (Dillion 1989).

Other implements known to have been used included waddies (often crafted from ironbark), yamsticks (up to 2 m long and 40 mm in diameter), fire sticks, wooden bowls (crafted from tree burls), bark water carriers with twig handles, shields (oval and up to 0.9 m long, 0.5 m wide and painted white with two red bands or stripes), clubs, boomerangs, baskets (made from palm leaves), and lances (from 5.5 m to 6.7 m in length) (Scott cited in DEDJTR 2015; Threlkeld cited in Gunson 1974; Barrallier 1802 cited in Heritage Alliance 2008; Neal and Stock 1986; Thomas 2008). Plant fibres (and fur cords) were also used to make fishing nets and twined dilly bags (Threlkeld cited in Dillion 1989; Gunson 1974; Thomas 2008). Women were described as making string from bark, and also being the crafters of fishing nets (Dawson 1830 cited in Dillion 1989; Thomas 2008).

5.3.2.2 Stone

Few ethnographic references describe the stone artefacts used by Aboriginal people in the Hunter region (Thomas 2008), however, stone axes were observed and an Australian Museum collection of implements included 'primitive flaked celts' made from chert (Thorpe 1928 cited in Dillion 1989; Thomas 2008). Stone axes had ground edges and were often made from basalt or diorite, with the stone fastened to a handle with gum. The handle was crafted from vines or saplings, which were heat treated (Mathews 1894 cited in Dillion 1989; Thomas 2008). Stone axes were used for cutting saplings, peeling bark, and cutting notches into trees (Threlkeld cited in Gunson 1974; Thomas 2008). Axe grinding grooves have been described as being indicative of a large scale manufacturing industry (Dillion 1989).

While not specified as being made from stone, Mathews (1894 cited in Thomas 2008) stated that the 'largest knives' were used for skinning and dressing prey. Barrallier (cited in Heritage Alliance 2008) also noted the use of a fish weir at Newcastle. Near Merewether, chert (silicified tuff) was described as being abundant (Thorpe 1928 cited in Thomas 2008). The toolkit included stone artefacts that could be used as chisels, scrapers, gravers and rasps (Dillion 1989).

5.3.2.3 Shell and bone

Shell was used to make fish hooks and tools. Fish hooks were made from oyster shell, while shell tools could be used to sharpen spears (until the advent of glass) (Threlkeld cited in Dillion 1989; Gunson 1974; Neal and Stock 1986; Thomas 2008). Kangaroo bones were made into combs or awls, the latter of which were used for sewing kangaroo and possum skin, belts and headbands (Heritage Alliance 2008; Neal and Stock 1986; Thomas 2008). Shell and glass were traded for possum skins, yarn and headbands (Dawson 1830 cited in Thomas 2008). According to Thorpe (1928 cited in Dillion 1989), shell middens extended from Port Waratah to Sandgate along the Hunter River. The sheer volume and size of the middens indicated a population of thousands (Dillion 1989; Gillison 1974).

5.3.3 Spiritual locations and culture

Other aspects of Aboriginal culture, such as burials, initiation ceremonies, corroborees and cosmological beings have been described in the ethnographic record (Thomas 2008). The following sites were considered to be of importance to Aboriginal people (Department of Transport Planning and Local Infrastructure 2014; from Wallsend & Plattsburg Sun 1890 and 1891, Threlkeld cited in Gunson 1974; Thomas 2008):

- 'Pòr-ro-bung' a bora ring
- 'Yu-lung' a ring where tooth extraction occurred
- 'Ko-pur-ra-ba' another volcano on the Hunter River, where red ochre ('ko-pur-ra') was sourced
- 'Pit-to-ba' a source of pipe-clay ('pit-to')
- 'Pu-r-ri-bang-ba', the ants' nest place, and another source of yellow ochre ('Pur-ro-bàng')
- 'Nir-rit-ti-ba' island, or Moon Island, where mutton bird and their eggs are eaten
- 'Nul-ka-nul-ka' at Reid's Mistake, a source of silicified tuff

The Eaglehawk was an important animal to the many tribal groups, and was significant in astronomy, legend and social structure (Dillion 1989; Gunson 1974). The use of fire has also been described as an integral part of the Aboriginal way of life, as it was used in farming, hunting, cooking, warmth, communication, initiation ceremonies, burials, mourning, weapon making, canoe construction, and fishing (Chandler 2008; Thomas 2008).

Initiation ceremonies often took place within one or two cleared circles, with the circles sometimes up to 350 m apart (Habermann 2003). Carved trees often marked the area around the circle. One known initiation ceremony included the extraction of a front tooth for boys (Threlkeld cited in Gunson 1974; Brayshaw 1987). Burials were often deposited in the ground, with the body placed in various positions, often covered in a bark shroud (Habermann 2003). Grave goods, such as spears and stone tools, were often buried with the deceased (Habermann 2003).

5.4 European and Aboriginal interaction

Many of the initial interactions between Aboriginal people and non-Aboriginal settlers (such as timber cutters, convicts and settlers) have been described as friendly (Allom Lovell and Associates 1998; Graeme Butler & Associates 2007; Threlkeld cited in Gunson 1974; Thomas 2008). In 1790, four convicts landed at Port Stephens after seizing a small vessel and sailing from Port Jackson. After landing, they lived with local Aboriginals for five years (Goold 1981; Thomas 2008). Another group of convicts, this time of 15 individuals, stole the Norfolk and wrecked it at Stockton, where six men chose to live with the local Aboriginal people. After several months, three men made their way back to Sydney, assisted by Aboriginal guides (Goold 1981).

In 1799, conflict arose on the shores of the Hunter River, where the Aboriginal people gathered in great numbers on the foreshores and drove the non-Aboriginal people away. An armed party was sent to rescue the remaining men, who the Aboriginal people had said had returned to Sydney overland, but they were not believed. Several Aboriginal people were wounded as a consequence of the resulting attack (Goold 1981). The early 1800s saw a variety of conflicts between escaped convicts and farmers (Andrews 2016), but in 1821, when Governor Macquarie visited Maitland, he was greeted by the chief of the 'Boan Native Tribe', Bungaree, who with his family, held a corroboree in welcome (Heritage Alliance 2008).

Aboriginal people also served as guides and trackers. In 1842, the explorer FW Ludwig Leichhardt was guided by Bo-win-bah (Gorman, chief of the Pambalong) and Biraban (Johnny M'Gill) from Ash Island to Minmi cattle station, around the margins of Hexham Wetlands (Department of Transport Planning and Local Infrastructure 2014; Thomas 2008). Peaceful encounters were soon replaced with serious conflict, however, generated from the mistreatment of Aboriginal women, misunderstandings with pastoral settlers, and violent behaviour from the convicts towards Aboriginal people (Gunson 1974; Dawson 1830 cited in Thomas 2008). Timber harvesting and hunting soon became other causes of conflict due to spiritual beliefs (trees were thought to house the souls of Aboriginal people awaiting rebirth, with some fauna being totem animals to Aboriginal people) (Allom Lovell and Associates 1998). From the 1830s, Aboriginal groups raided settlers for food and those who were captured were tried before the Supreme Court in Sydney; some were acquitted, others sentenced to death (Wooldridge 2016).

Aboriginal populations suffered a dramatic decline after the arrival of non-Aboriginal settlers, with disease, the loss of traditional hunting grounds, and conflict with settlers (including massacres of Aboriginal people (Dillion 1989) all contributing to the reduced number of Aboriginal people. In 1821 in the Lake Macquarie area, over 100 individuals were observed by Reverend Middleton, whereas in 1840, only 15 adult males, seven adult females and four children were recorded (Thomas 2008). Diseases such as smallpox, typhoid, influenza, scarlet fever, measles, diphtheria, whooping cough and croup were all disastrous to the Aboriginal people (DEPI 2015; Dillion 1989; Thomas 2008). The smallpox epidemics alone, in 1789, 1829 and 1831, meant that it was impossible for non-Aboriginal settlers to understand the population sizes of Aboriginal people prior to European arrival (Gunson 1974; Thomas 2008). The first epidemic was reported to have reduced the Aboriginal population by half, between Botany Bay and the Hawkesbury (Lovell Chen 2016).

Due to the loss of traditional hunting grounds and the modification of the landscape, food resources such as kangaroo, wallaby, emu and possum became scarce (Wilson cited in Graeme Butler & Associates 2007). Normal hunting processes were also restricted by the clearing of vegetation and draining of lagoons (Graeme Butler & Associates 2007). However, Wooldridge (2016) argued that European settlement was not a major factor in Aboriginal population decline; rather, it was violence of non-Aboriginal men against Aboriginal women. Threlkeld (cited in Gunson 1974) and Dawson (cited in Thomas 2008) both report on the violence committed against Aboriginal women – including young girls – with rape resulting in the possible transmission of diseases which could lead to infertility, and the practice of infanticide reported by Reverend Middleton (Dillion 1989; Graeme Butler & Associates 2007). While violence against women would have certainly had an effect on populations, the culmination of general violence, landscape alteration and diseases would have all contributed to the massive reduction in Aboriginal populations in the region. The population loss affected traditional practices, such as kinship systems, marriage, subsistence strategies and more (Thomas 2008).

By the 1840s, Aboriginal people were reliant on settlers for clothing, food and money (Graeme Butler & Associates 2007; Thomas 2008) and were employed in a variety of functions, such as timber cutters, water drawers, farm assistants, and errand runners, among others (Graeme Butler & Associates 2007; Murphy and Morris 2013). Near the end of the 19th century, concern over the Aboriginal peoples' plight took root, with the Aborigines Protection Association formed in 1881. In 1883, a Board for the Protection of Aborigines was established by the government, and rural stations were developed to allow Aboriginal people to stay on traditional lands (Thomas 2008). Yet by the mid-20th century, Aboriginal people had begun to move to Newcastle and Lake Macquarie to escape the oppression of the Aborigines Protection Board and to gain employment (Thomas 2008). Between 1909 and 1967, 5,300 Aboriginal children had been removed from their families and placed in institutions (Thomas 2008). The main sources of employment during this time were Broken Hill Propriety Limited and the Department of Railways, with Aboriginal people living in shanty settlements or in tent villages near the railway lines (Dillion 1989; Thomas 2008). In the 1930s, the new policy of assimilation was created, to try and absorb Aboriginal people into the wider community, and by the 1940s, the concept of re-settlement was established. By the 1960s, Aboriginal people were once again occupying Newcastle (at the university) (Dillion 1989). Those living at the university were 'removed' from the premises (Dillion 1989). Kuskie also documented significant and widespread traditional, historical and contemporary cultural values identified by registered Aboriginal parties and ethno-historical evidence. Associations and cultural values included a number of gender related sites, the association of Mount Sugarloaf with the supreme being 'Koe-in', burial locations, and pathways throughout the landscape, such as through Black Hill Spur, Hexham Swamp and along Sugarloaf Ridge (Kuskie 1997).

The Aboriginal people of the Hunter region would have used the wide variety of natural resources present within the fertile landscape, and ethno-historical accounts list some of the methods through which Aboriginal people harvested fruits, nuts, marine resources, terrestrial fauna, birds and so forth. While there are gaps in the ethno-historical account, such as the lack of description regarding stone artefact manufacture and use, it does provide a basis that can be used to understand how Aboriginal people used the landscape prior to non-Aboriginal colonisation.

Modification of the landscape by Aboriginal people took place through the use of fire farming and reed planting/weir development, but little evidence of such activities is likely to have been preserved in the archaeological record due to the perishable nature of the materials used and the consequent alteration of the landscape through non-Aboriginal occupation. Evidence of campsites, through deposits of stone artefacts and shell, hearths or middens are, in contrast, likely to be found where the landscape has not suffered severe ground disturbance or sedimentation. While ethno-historical accounts make reference to camps being located near waterways, campsites would not have been limited to riverbanks. These descriptions do, however, aid in developing a predictive model for the location of Aboriginal sites.

5.5 Implications for the distribution of Aboriginal cultural heritage

Scarred trees, which were a result of the production of items such as canoes, containers, shelters and bowls also have the potential to be present within the region. Carved trees, which were decorated with designs and could be associated with ceremonial sites, are much rarer. However, the prevalence of logging in the Hunter region would have severely reduced remaining scarred and carved tree numbers.

Other sites, such as grinding grooves, stone quarries, burials and ceremonial grounds (bora rings, stone arrangements), while rarer, are discussed in the ethno-historical records and are known to be focal points within the current cultural landscape.

6. Aboriginal cultural values and landscapes

6.1 Method of obtaining information

Input and feedback can be provided by RAPs at any time throughout the assessment process. Jacobs has sought input and feedback from RAPs at several points during the process (following procedures outlined in DECCW 2010a):

- During Stage 2 – Initial presentation of information about the Proposal
- During Stage 3 – Providing RAPs with the draft proposed cultural heritage assessment methodology. RAPs were invited to provide feedback on the proposed methodology, and to identify cultural heritage values associated with the Proposal Site
- During fieldwork
- During Stage 4 – Providing RAPs with the draft Aboriginal Cultural Heritage Assessment Report. RAPs are invited to provide feedback on the report, and any further information they wish to be included.

6.2 Previous cultural values assessment for Testers Hollow

The cultural values assessment prepared for the upgrade of the causeway at Testers Hollow (Jacobs 2019) was reviewed by the author. Testers Hollow is located four km east of the Proposal Site and is also located on the southern reaches of the Wentworth Swamps. The archaeologists undertook interviews with several elders who all discussed the importance of the creek lines and swamps. The cultural values of the region identified in the Testers Hollow assessment are summarised below in Table 6.1.

Table 6.1: Cultural heritage values identified in the Testers Hollow Cultural Values assessment

Cultural heritage value	Description
Resource gathering locations and techniques	Knowledge holders noted that fish, plants and other foods are still collected throughout the region. The primary resource gathering locations, and the techniques used, are known and passed down through the generations.
Campsites	Knowledge holders identified campsites as culturally significant as they provide a link to the ancestral past identify significant resource zones, pathways taken by their ancestors through the landscape and communication between other groups. Identified site locations containing hearths and/or stone artefact scatters were noted as having these types of cultural significance.
Scarred trees	Scarred trees are of great importance to knowledge holders as they are of sacred and ceremonial importance. European land use and agricultural practices has resulted in scarred trees can often be the only remaining markers for ceremonial sites and burials in the landscape. None were specifically noted during the CVA or archaeological assessment however they are known by knowledge holders to be common throughout the Hunter Valley in places where older stands of trees are extant (usually near permanent water sources). They also noted that scarred trees may be located at junctions, ceremonial sites or other significant points in the landscape.

Cultural heritage value	Description
Transit routes/pathways through the landscape	Aboriginal knowledge holders identified pathways/transit routes that bordered the larger area and in particular, to the east on ridges near Black Mountain and Mount Sugarloaf. These pathways link spiritual and ceremonial sites, as well as travel corridors throughout the landscape between the coast and higher ground. During the assessment the importance of waterways and creek junctions was remarked upon. Additionally, ridgelines were mentioned for their association with dreaming routes. These routes link spiritual and ceremonial sites. Artefact scatters often occur along transit routes, as well as scarred trees which may be located at tribal boundaries, ceremonial sites or other significant points in the landscape.
Water courses, water holes or springs	Permanent water bodies are culturally significant as a central location for gathering of people, resource collection and camping. Wallis Creek was notable in this respect
Plants and animals	During discussions the fauna and flora were often mentioned in context of spiritual importance. Throughout consultation, plants and animals were sometimes mentioned in discussion with resource collection. No specific species were mentioned however.
Burial sites	Burial sites are of great importance and are generally of high concern to Aboriginal people as the locations of burials are rarely documented. Knowledge holders identified the landscape features chosen for burial sites as being areas near campsites and on sandy rises however none were specifically identified for the study area.
Songlines	Aboriginal knowledge holders identified songlines that traversed or intersected wider landscape. These pathways link spiritual and ceremonial sites, as well as travel corridors throughout the landscape between the coast and higher ground. The specific details of these songlines were however not shared in this assessment.
Post-contact sites	Post-contact sites are those that have gained significance to Aboriginal people since the arrival of European settlers. No sites of this type were mentioned as having any particular significance in the study area.
Massacre sites	These sites are highly significant to the traditional owners and are often difficult to discuss. Knowledge holders have previously indicated that an early 19 th century massacre on the Hunter River near Singleton still resonates with people in the area today. The event was not confined to one locality as the killings were known to have been widespread.
Cultural knowledge	Knowledge holders have, in many contexts, indicated grave concern for the loss of cultural knowledge and the meanings embedded in the landscape of the region. It is felt that the loss that began with early colonisation has been exasperated by significant development in the region. The sense of loss and belonging instils a feeling of guilt that the country is not being protected for the future generations; that there is poor cultural heritage management, and that archaeologists have been instrumental in facilitating the destruction of cultural sites.

6.3 Cultural heritage values Identified during this assessment

Discussions regarding the cultural values of the Proposal Site were undertaken on 12 of January 2021 during the site meeting and survey held on the 12 January 2021 (refer to Appendix B).

Steven Hickey (Widescope Indigenous Group) described that the Proposal Site is a part of a gathering area with two major sites linked by a travelling route, a ceremony area to the west and a hunter gather area to the south. They are linked with a travel route north to the Hunter River at Maitland. As a part of this discussion Arthur Fletcher (Wonn1) emphasised that the major part of the value of these sites is not physical but spiritual.

Kerrie Brauer (Awabakal Traditional Owners Aboriginal Corporation) provided the following statement regarding the significance and cultural values of the region.

Statement of Significance by the Awabakal and Guringai Peoples

Awabakal and Guringai is one of the 600 or more language groups or 'nations' that existed across Australia at the time of European contact and are part of the oldest and continuous living Culture in human history.

Our People were recorded within our Traditional Country and acknowledged in the first records ever made of the Aboriginal People of the wider Lake Macquarie, Newcastle, Maitland, Wollombi, Cessnock, Kurri Kurri, Central Coast, Hawkesbury, North Shore and various Sydney areas. Prominent people such as L.E.Threlkeld, Jonathon Warner and many others documented our Peoples Cultural Heritage and Language in detail going back to the very early 1800's.

Our people believe that all our sites and Traditional Culture that has existed for many thousands of years within our area are a tangible link to our Ancestors and our past. Surveys and assessments within our Traditional Country have identified Aboriginal Cultural Heritage Sites (the tangible evidence of occupation) and (the intangible evidence) of landscape features of cultural value embedded within a landscape that provided physical and spiritual sustenance to the Awabakal and Guringai Peoples.

The survival of these sites is significant to the continuation of the collective knowledge and inspiration for our young people and coming generations of Awabakal and Guringai Peoples, and those Aboriginal People that are invited into our Country. We acknowledge our Ancestors for passing on knowledge and also the legacy for us to continue what they put into place, to pass on our Cultural Heritage and Values to protect our sites for all those in the future.

The Awabakal and Guringai presence extends from the present day back many thousands of years and is reflected in both tangible and intangible aspects of Aboriginal Culture, Heritage, Value and history. As Awabakal and Guringai Peoples, we hold Cultural Knowledge that has been passed down from our Ancestors about our Traditional Country for thousands of years and a spiritual awareness, connectedness, presence, and value of place that connects us with the Land of our People. Therefore, the Awabakal and Guringai People have a continuing, contemporary history of obligation to protect and preserve the Cultural Heritage within our traditional cultural boundary areas.

We maintain concerns over Mining and Development licences being approved within our Traditional Cultural Boundary, and the adverse impacts this has on our Cultural Heritage, Values, landscape and sea country features, and the footprints of our Ancestors which are being impacted through cumulative and overlapping development, mining and unmonitored and unmanaged human recreational activities. The mental, physical and spiritual wellbeing of the Awabakal and Guringai Peoples and those Aboriginal Peoples that feel an association to this landscape is also a contemporary phenomenon and not just 'a thing of the past'.

The Awabakal and Guringai Aboriginal Cultural Heritage sites are identified as having significant Cultural and Spiritual Value, and are numerous within our Traditional Cultural Boundary. These sites and landscape features link contemporary Awabakal and Guringai Peoples through generations of their Ancestors, and are extremely important teaching places and places of spiritual renewal.

The custodial rights and obligations of our people Caring for Country underpin the principles of this statement of significance. It is highlighted, however, that the Awabakal and Guringai Peoples in no way support any impact to our sites, landscape features and cultural value or any aspect of the natural environment within our Awabakal and Guringai Traditional Boundary. Aboriginal people inherit the right and obligation to Care for Country, and endorsing any form of harm in our view is assessed as culturally and ethically inappropriate. (© Awabakal & Guringai 2013)

7. Summary of archaeological assessment

The AAR, which contains detailed data on the method and results of the archaeological assessment, is provided in Appendix B.

7.1 Environmental context

Land to the east and north of the Proposal Site comprises low-lying and largely flat, open rural land. It includes the waterways of Swamp Creek, Black Waterholes Creek and the Swamp Creek wetlands, which drain to the Wentworth swamps and are part of the Hunter River floodplain. Land outside the Proposal Site gradually slopes (and drains) to the north-east, towards Black Waterholes Creek. The Proposal Site includes alluvial deposits from the Neath soil landscape which consists of undulating low rises and swamps.

7.1.1 Vegetation

The nearby Wentworth Swamp supports a freshwater wetland vegetation community, containing specified vegetation such as Forest Redgum (*Eucalyptus tereticornis*), Swamp Oak (*Casuarina glauca*), Snow-in-Summer (*Melaleuca linariifolia*) and Cabbage Gum (*Eucalyptus amplifolia*). A large majority of the Proposal Site has been cleared for pasture and as a result contains pasture grasses, legumes and weeds.

Though the current vegetation communities are not characteristic of the original vegetation, it can be deduced that the original vegetation would have supplied and supported Aboriginal groups camping in the area and passing through. The close presence of Wentworth Swamp would have supported a large and diverse range of plant and animal species which could have been regularly exploited.

7.1.2 Former land use and disturbance

Following the first non-Aboriginal settlers into the region, large portions of land to the north of the Proposal Site were reserved as Village Reserve (V.R.) and Travelling Stock Route (T.S.R. 37). Land which was cultivated was predominantly used for beef cattle rearing / grazing.

The greater Kurri Kurri area remained predominantly rural until the discovery of coal in commercial quantities and the subsequent development of the South Maitland Coalfields. Greta Coal and Shale Mine Company were the first commercial coal operation in the area, forming in 1864 (Parkes et al. 1979: 217).

Following the decline in the coal mining industry in the 1950s and 1960s, the Proposal Site was commissioned for the Hydro Aluminium Kurri Kurri Pty Ltd aluminium smelter in 1969. The capacity of the aluminium smelter was less than 25,000 tonnes of aluminium per annum. Two expansion projects brought the annual tonnage to 150,000 tonnes by 1985. The aluminium smelter ceased operation in late 2012 and was permanently closed in 2014. The construction and operation of the smelter resulted in significant disturbances to the Proposal Site.

The Proposal Site has seen extensive native vegetation clearance, pastoral activities such as livestock grazing, and the construction and expansion of the Kurri Kurri aluminium smelter.

7.2 Summary

In summary, the Proposal Site is located in an area that would have provided sufficient resources for Aboriginal people to exploit. This would have been an attractive area for people to use and occupy, due to the availability of permanent potable water, ephemeral streams and proximity to the Wentworth Swamp. Evidence of this utilisation would be expected to be identified in the Proposal Site, however, land use activities in this area since European occupation are likely to have affected this.

The Proposal Site has been heavily disturbed by past development including the former Kurri Kurri aluminium smelter, and subsequently by the demolition and remediation works currently under way. It is therefore considered unlikely that Aboriginal archaeological material would exist at the Proposal Site, other than in deep alluvium that has not been previously disturbed, or in the location of the proposed switchyard (northern extent of the Proposal Site, which has been disturbed, but to a lesser extent). Therefore, while the Proposal Site lies in proximity to nearby areas that have revealed evidence of past Aboriginal use or occupation, it is less likely to contain any such evidence that might be uncovered in construction of the Proposal.

7.3 Archaeological assessment results

The long post-contact history of development in the area has resulted in destruction of a large number of Aboriginal sites. A search of the Aboriginal Heritage Information Management System (AHIMS) was undertaken on 22 October 2020 covering the footprint of the Proposal Site and a 2.5 km buffer zone. Seventy-eight previously recorded sites are present near the Proposal Site (no sites were identified within the Proposal Site). All sites are artefact scatters on open ground, four of which include an area of potential archaeological deposit.

The archaeological survey was carried out on the 12 January 2021 and 11 February 2021 (refer to Figure 7.1). On-site consultation with nominated site officers from the RAPs contributed to the development of management and mitigation recommendations, including recommendations for any further assessment. No Aboriginal archaeological sites were identified within the Proposal Site. Potential for Aboriginal archaeological deposits to survive at depth was identified.

It is not possible to investigate this archaeological potential through archaeological test excavation under the Code of Practice due to the depth. As a result, the presence and extent of any Aboriginal objects at depth cannot be determined as a part of this assessment.

Further details and results of the archaeological assessment of the Proposal Site are provided in Appendix B.



 Proposal Site
 Survey units
 Motorway
 Waterbodies
 Roads
 Cadastre
 Railway

- ① Proposed Switchyard Area
- ② Proposed Plant Area
- ③ Proposed Buffer Area

0 250 500 m

1:10,013 at A4
 Coordinate System: GDA2020 MGA Zone 56

Data sources:
 Jacobs 2020
 NearMap 2020
 NSW Spatial Services



Figure 8-1 Aboriginal archaeological survey units

8. Significance assessment

8.1 Methodology

A significance assessment is made up of several significance criteria that attempt to define why a site is important. Such assessment recognises that sites may be important for different reasons to different people, and even at different times. The assessment of Aboriginal cultural heritage in this assessment is based upon the four values of the Australia ICOMOS Burra Charter (Australia ICOMOS 2013).

- Social values
- Historical values
- Scientific values
- Aesthetic values.

Each of these values would be assessed for Aboriginal sites in the Proposal Site, and an overall significance would be assigned based on an average across the values.

However, no Aboriginal sites were found within the Proposal Site that could be assessed in this manner. The potential subsurface deposits surviving within the alluvium are unable to be investigated as part of this assessment and therefore cannot be assessed for significance.

Previous work in the region has identified that there is a potential for Aboriginal objects to be located in alluvium. Where these objects are present, their distribution is generally intermittent and sparse. If Aboriginal objects are present in the alluvium on the Proposal Site, it is expected that a similar distribution pattern would be encountered.

9. Impact assessment

The Proposal works would have no impact on AHIMS sites as no surface Aboriginal objects were identified within the Proposal Site. However the archaeological assessment (Appendix B) identified the potential for subsurface deposits surviving at depth within the alluvium. This deeper alluvium may be subject to impact through the construction of concrete foundation piling and bulk excavation.

9.1 Piling works

The piling works would impact only the potential deposits in the area of the piling foundations. The surrounding material would be preserved beneath the concrete slab foundations and introduced fill currently present on the Proposal Site. Testing to determine the nature and extent of any potential subsurface deposits could not be undertaken in accordance with the Code of Practice for the investigation of Aboriginal objects, due to the depth. It is proposed to undertake monitoring of the piling works according to a methodology that includes recovery of Aboriginal objects if they are identified. If objects are present, the location would be recorded on AHIMS, in accordance with s89a of the *National Parks and Wildlife Act 1974*.

9.2 Bulk excavation works

In the areas of bulk excavation for the gas turbine footings and for the sediment retention and stormwater basin, test excavation in accordance with the Code of Practice for the investigation of Aboriginal objects is also not possible due to the depth of fill (potentially under 1.5 m of fill from the former Kurri Kurri aluminium smelter earthworks) coupled with the depth of the underlying alluvial deposits and due to the presence of the existing live high voltage electrical switchyard. It is proposed instead to monitor the bulk excavation of both the turbine footings and sediment retention and stormwater basin. If Aboriginal objects are identified through monitoring, bulk excavation would cease in the local area while hand excavation is undertaken to assess and recover objects. If objects are present, the location would be recorded on AHIMS, in accordance with s89a of the *National Parks and Wildlife Act 1974*.

9.3 Cumulative impacts

Assessing cumulative impacts involves the consideration of the Proposal's impact in the context of existing developments and past destruction of heritage sites, as well as the population of heritage sites that still exist in the region of interest (Godwin 2011). The concept of assessing cumulative impacts aims to avoid discussing the impact of a development in isolation, and aims to assess the impact in terms of the overall past and future degradation of a region's heritage resource.

Prior impact to large areas of land in the immediate surrounding region, and across the Hunter Valley overall, have increased the rarity of surviving Aboriginal sites in the region. However, the majority of impacts that would result from the Proposal are located within already disturbed and impacted areas and the Proposal is unlikely to further harm Aboriginal objects, if present.

The cumulative impact of the Proposal is assessed as being low, as the Proposal would not result in a substantial reduction in the region's Aboriginal archaeological resource.

10. Management recommendations

Where complete avoidance of sites or potential archaeological deposits by the Proposal is not possible, mitigation measures have been provided. Environmental management measures have been identified with consideration of the likely degree of impact. A key measure to manage impacts on identified sites with higher scientific significance is to carry out salvage of further artefacts to improve the understanding of the areas impacted by the Proposal.

10.1 Cultural awareness training

During site inductions for construction of the Proposal, all members of the construction workforce would undergo cultural awareness training. The training, which would be coordinated by the Contractor's Environmental Manager, would incorporate material provided by the RAPs, with the specific aim of raising awareness of the cultural heritage values held by the local Aboriginal community, in respect of the Proposal Site and surrounding land, as set out in section 6.3. The overall objective of the training, besides a general raising of cultural awareness, would be to assist in the implementation of other recommended cultural heritage management measures as outlined in the following sections.

10.2 Monitoring

In the areas where the deep alluvium will be impacted through piling, or bulk excavation works, it will be monitored by an archaeologist and a representative of the RAPs and any Aboriginal objects uncovered during these activities will be collected and their location recorded on AHIMS, in accordance with s89a of the *National Parks and Wildlife Act 1974*.

The artefact assemblage would be temporarily stored and analysed. Long term management of those objects will be determined in consultation with the RAPs.

10.3 Potential human skeletal remains

If skeletal remains are uncovered during the Proposal works, all work must stop immediately in the vicinity of the remains and the area secured, so that no further harm occurs.

If it is identified that the skeletal remains are likely to be human and are likely to represent a crime scene, the NSW Police must be called in the first instance. The NSW Police will determine the appropriate course of action.

If it is identified that the skeletal remains are likely to be human and are likely to represent Aboriginal Ancestral Remains, or human remains that would require consideration under the *Heritage Act 1977* (both Aboriginal and non-Aboriginal), both the NSW Police and Heritage NSW must be called. The RAPs will also be informed. Heritage NSW will determine the appropriate course of action.

Work may not recommence in this area until either NSW Police or Heritage NSW provide authorisation.

Please note, if the remains are identified as Aboriginal, discussions and negotiations would need to occur with the relevant Aboriginal communities and Heritage NSW to determine the most appropriate course of action. These discussions would be led by Heritage NSW.

If it is identified that the skeletal remains are not human, appropriate recording must take place and works can continue.

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Appendix A. Aboriginal community consultation

- A.1 Agency and RAP letter**
- A.2 Advertisements**
- A.3 Submissions and responses**

2 November 2020

Attention: Senior Team Leader, Aboriginal Cultural Heritage Regulation North
Heritage NSW - Hunter
Level 4, 26 Honeysuckle Drive, Newcastle, NSW 2300

Via Email: heritagemailbox@environment.nsw.gov.au

Subject: Seeking Aboriginal knowledge holders to assist Snowy Hydro to prepare a cultural heritage assessment report for a gas fired power station at Kurri Kurri, NSW

Snowy Hydro Limited (Snowy Hydro) are proposing the construction and operation of a gas fired power station, electrical switchyard and associated infrastructure (the "Proposal"). The Proposal would be situated on land previously occupied by the former Hydro Aluminium Kurri Kurri Pty Ltd aluminium smelter located in Loxford in the Hunter Valley region of New South Wales, approximately 3 km north of the town of Kurri Kurri, 35 km west of Newcastle and 125 km north of Sydney.

The Proposal area under consideration is shown in **Attachment A** and is within the Cessnock City Council local government area.

Jacobs, on behalf of Snowy Hydro is currently preparing to conduct an environmental assessment of the proposal in accordance with Division 4.7 of the *Environmental Planning and Assessment Act 1979* (NSW). Jacobs, on behalf of Snowy Hydro is seeking registrations of interest from Aboriginal people who hold cultural knowledge relevant to the site. The purpose of consultation with the Aboriginal community will be to assist Snowy Hydro in the preparation of a cultural heritage assessment report, and to assist the relevant NSW agencies in their consideration of any subsequent applications.

In accordance with section 4.1.2 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010), it would be appreciated if your organisation could please provide a list of the names of, or pass this request along to, Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or Aboriginal places for the Proposal within the Proposal area.



Thank you for your assistance and advice in this matter. If you have any questions or would like to discuss this further, please contact me as per the contact details below:

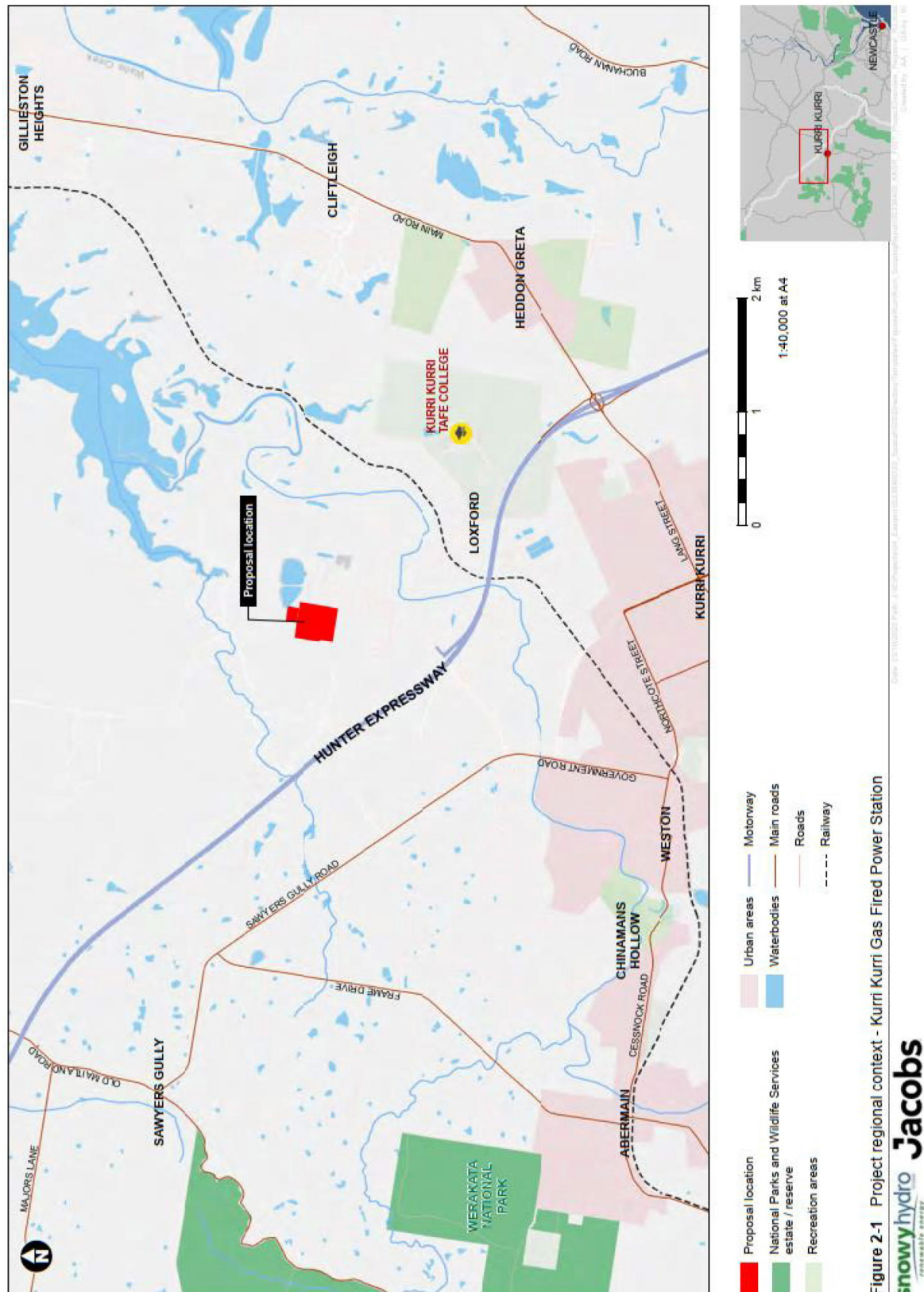
Alison Lamond
Level 4, 12 Stewart Avenue, Newcastle West, NSW 2302
Alison.lamond@jacobs.com

Yours sincerely,

A handwritten signature in black ink, appearing to read "Alison Lamond".

Alison Lamond
Project Archaeologist
0417 980 800
Alison.lamond@jacobs.com

Attachment A. The Proposal Area



03 November 2020

By email: Alison.lamond@jacobs.com

Alison Lamond
Jacobs
Level 4, 12 Stewart Avenue
NEWCASTLE NSW 2302

Dear Alison,

Request - Search for Registered Aboriginal Owners

We refer to your email dated 02 November 2020 seeking the identification of Aboriginal organisations and people who may have an interest in the proposed construction and operation of a gas fired power station, electrical switchyard and associated infrastructure residential development in the Cessnock City Council Local Government Area (LGA) New South Wales.

Under Section 170 of the Aboriginal Land Rights Act 1983 the Office of the Registrar is required to maintain the Register of Aboriginal Owners (RAO). A search of the RAO has shown that there are currently no Registered Aboriginal Owners in the project area.

We suggest you contact the Mindaribba Local Aboriginal Land Council on (02) 4015 7000 or via email ceo@mindaribbalalc.org as they may wish to participate.

Yours sincerely



Rachel Rewiri
Project Officer
Office of the Registrar, Aboriginal Land Rights Act 1983



Reference: DOC20/906321

Ms Alison Lamond
Project Archaeologist
Jacobs Australia Pty Ltd
Alison.lamond@jacobs.com

RE: Proposed Aboriginal Cultural Heritage Assessment for a gas fired power station at Kurri Kurri, NSW.

Dear Ms Lamond,

Thank you for your letter of 2 November 2020 about Aboriginal cultural heritage consultation for the proposed above matter within the Cessnock local government area. I appreciate the opportunity to provide input.

Please find enclosed a list of known Aboriginal parties for the Cessnock local government area (Attachment 1) that we consider likely to have an interest in the proposal. Note this is not an exhaustive list of all interested Aboriginal parties. Receipt of this list does not remove the requirement for a proponent/consultant to advertise the proposal in the local print media and contact other bodies and community groups seeking interested Aboriginal parties, in accordance with the '*Aboriginal cultural heritage consultation requirements for proponents 2010*' (the CRs).

We would also like to take this opportunity to remind the proponent and consultant to ensure that consultation is fair, equitable and transparent. If the Aboriginal parties express concern or are opposed to parts of or the entire project, we expect that evidence will be provided to demonstrate the efforts made to find common ground between the opponents and the proponent.

If you have any questions about this advice, please do not hesitate to contact me via rosalie.neve@environment.nsw.gov.au or 02 6659 8221.

Yours sincerely

Rosalie Neve
Aboriginal Heritage Planning Officer
Aboriginal Cultural Heritage Regulation - Northern
Heritage NSW
Department of Premier and Cabinet

11 November 2020

Attachment 1: Aboriginal Cultural Heritage Regulation North - Aboriginal Stakeholder List (other than Local Aboriginal Land Councils) for Cessnock LGA

Organisation	First name	Surname	Address 1	City	State	Post code	Landline	Mobile	Email
Organisation	First name	Surname	Address 1	City	State	Post code	Landline	Mobile	Email
A1 Indigenous Services					NSW				
AGA Services					NSW				
Aliera French Trading					NSW				
Arwabukarl Cultural Resource Association, Miromaa					NSW				
Aboriginal Language and Technology Centre									
Awabakal & Guringai Pty Ltd					NSW				
Awabakal Descendants					NSW				
Traditional Owners									
Awabakal Traditional Owners					NSW				
Aboriginal Corporation									
Cacatua Culture Consultants					NSW				
Corroboree Aboriginal Corporation					NSW				
Crimson-Rosie					NSW				
Culturally Aware					NSW				
D F T V Enterprises					NSW				
Deslee Talbott Consultants					NSW				
Didge Ngunawal Clan					NSW				
Divine Diggers Aboriginal Cultural Consultants					NSW				
Gidawaa Walang & Barkuma									
Neighbourhood Centre Inc.					NSW				

Organisation	First name	Surname	Address 1	City	State	Post code	Landline	Mobile	Email
Hunter Traditional Owner					NSW				
Hunter Valley Cultural Surveying					NSW				
Indigenous Learning					NSW				
Jarban & Mugrebea					NSW				
Kauma Pondee Inc.					NSW				
Kawul Pty Ltd trading as Wonn1 Sites					NSW				
Lower Hunter Aboriginal Incorporated					NSW				
Lower Hunter Wonnarua Cultural Services					NSW				
Lower Wonnarua Tribal Consultancy Pty Ltd					NSW				
Mayaroo					NSW				
Michael Green Cultural Heritage Consultant					NSW				
Murra Bidgee Mullangari Aboriginal Corporation					NSW				
Myland Cultural & Heritage Group					NSW				
Nunawanna Aboriginal Corporation					NSW				
Roger Matthews Consultancy					NSW				
Ungooroo Aboriginal Corporation					NSW				
Wallagan Cultural Services					NSW				
Wattaka Wonnarua CC Service					NSW				
Widescope Indigenous Group					NSW				
Wonnarua Culture Heritage					NSW				
Wonnarua Elders Council					NSW				
Wonnarua Nation Aboriginal Corporation					NSW				

Organisation	First name	Surname	Address 1	City	State	Post code	Landline	Mobile	Email
Yarrawalk (A division of Tocomwall Pty Ltd), Tocomwall Pty Ltd on behalf of Scott Franks and Anor on behalf of the Plains Clans of the Wonnarua People NSD1680/2013 Yinarr Cultural Services					NSW				
					NSW				
					NSW				
					NSW				
					NSW				

11 November 2020

Attention: [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

By email: [REDACTED]

Dear [REDACTED]

Subject: Seeking Aboriginal knowledge holders to assist Snowy Hydro to prepare a cultural heritage assessment report for a gas fired power station at Kurri Kurri, NSW

Snowy Hydro Limited (Snowy Hydro) are proposing the construction and operation of a gas fired power station, electrical switchyard and associated infrastructure (the "Proposal"). The Proposal would be situated on land previously occupied by the former Hydro Aluminium Kurri Kurri Pty Ltd aluminium smelter located in Loxford in the Hunter Valley region of New South Wales, approximately 3 km north of the town of Kurri Kurri, 35 km west of Newcastle and 125 km north of Sydney.

The Proposal area is shown in **Attachment A** and is within the Cessnock City Council local government area.

Jacobs, on behalf of Snowy Hydro is currently drafting an Environmental Impact Statement in accordance with Division 4.7 of the *Environmental Planning and Assessment Act 1979* (NSW). The Name and contact details of the proponent are:

Ian Smith

ian.smith@snowyhydro.com.au

0409 840 165

As per the consultation guidelines, Jacobs, on behalf of Snowy Hydro is seeking registrations of interest from Aboriginal people who hold cultural knowledge relevant to the Proposal area. The purpose of consultation with the Aboriginal community is to assist Snowy Hydro in the preparation of a cultural heritage assessment report, and to assist in the assessment and approval of the Proposal by the NSW Minister for Planning and Public Spaces.

Jacobs is also inviting registrations of interest in the process of community consultation from Aboriginal person(s) or groups who hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places at Kurri Kurri.

Please note that Section 4.1.6 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010) requires the proponent to advise Heritage NSW (formerly Office of Environment and Heritage) and the LALC of Aboriginal people who have registered an interest in the Proposal. Please advise if you **do not** want your details forwarded to the LALC.



Attention: Tracey Howie & Kerrie Brauer

We hope you or your organisation choose to participate in this Proposal and enclose for your completion a Notice to Register. **These completed forms need to be returned to Jacobs by 5pm 25 November 2020.**

Ian Smith
C/O Alison Lamond
Level 4, 12 Stewart Avenue, Newcastle West NSW 2302
Alison.lamond@jacobs.com

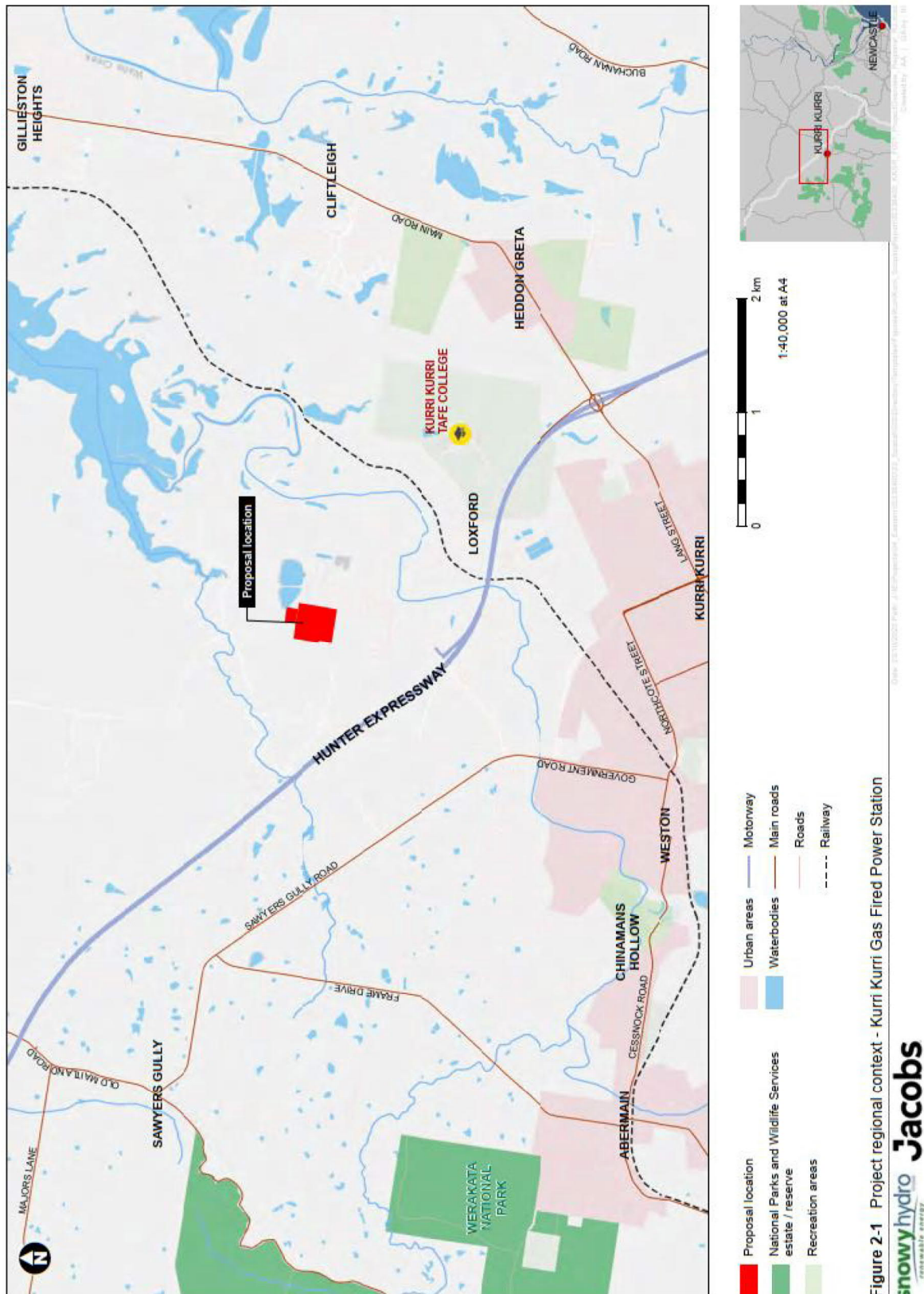
Thank you for your assistance and advice in this matter. If you have any questions or would like to discuss this further, please contact me as per the contact details below:

Yours sincerely,

A handwritten signature in black ink, appearing to read "Alison Lamond".

Alison Lamond
Project Archaeologist
(+61) 0417 980 800
Alison.lamond@jacobs.com

Attachment A. The Proposal Area





Proposed Gas Fired Power Station, Kurri Kurri, NSW

Notice and registration of Aboriginal interests

Snowy Hydro Limited (Snowy Hydro) are proposing the construction and operation of a gas fired power station, electrical switchyard and associated infrastructure (the "Proposal"). The Proposal would be situated on land previously occupied by the former Hydro Aluminium Kurri Kurri Pty Ltd aluminium smelter located in Loxford in the Hunter Valley region of New South Wales, approximately 3 km north of the town of Kurri Kurri. These activities would be within the Cessnock Local Government Area.

As per the consultation guidelines, Jacobs, on behalf of Snowy Hydro is seeking registrations of interest from Aboriginal people who hold cultural knowledge relevant to the Proposal site. The purpose of consultation with the Aboriginal community is to assist Snowy Hydro in the preparation of a cultural heritage assessment report, and to assist the Director General of Heritage NSW in their consideration of any subsequent applications.

Jacobs, on behalf of Snowy Hydro, is therefore seeking to establish Registered Aboriginal Parties for all upcoming Aboriginal Heritage assessments associated with the site.

You can register in writing (email or letter) to:

Ian Smith
Snowy Hydro

c/o Alison Lamond
Jacobs Group (Australia)

Email: Alison.lamond@jacobs.com

Level 4, 12 Stewart Avenue,
Newcastle West, NSW 2302

Registrations must be received by close of business 23 November 2020.

Lamond, Alison

From: cacatua4service@tpg.com.au
Sent: Tuesday, 17 November 2020 5:24 PM
To: Lamond, Alison
Subject: [EXTERNAL] AGA Services EOI for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station

Alison,

AGA Services wishes to express an interest in being involved in the above Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station.

Thanks
Ashley Sampson
Manager/partner

----- Original Message -----

From:
"Lamond Alison" <Alison.Lamond@jacobs.com>

To:
"cacatua4service@tpg.com.au" <cacatua4service@tpg.com.au>
Cc:

Sent:
Wed, 11 Nov 2020 01:22:05 +0000
Subject:
Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station

Hello

Please find attached a letter detailing our invitation to register your interest for Aboriginal Cultural Heritage assessment for the Kurri Kurri Gas Fired Power Station Project. We look forward to your response, please note that registrations close **25 November 2020**.

Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist

+61 2 4979 2647 | + 61 417 980 800

alison.lamond@jacobs.com

Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302| Australia

I acknowledge the Traditional Owners of Country upon which I work, and pay my respects to them, their culture and their Elders past, present and future.

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Lamond, Alison

From: cacatua4service@tpg.com.au
Sent: Tuesday, 17 November 2020 5:22 PM
To: Lamond, Alison
Subject: [EXTERNAL] Cacatua EOI for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station

Alison,

Cacatua General Services wish to express an interest in being involved in the Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station.

Cheers
George Sampson
Manager

----- Original Message -----

From:
"Lamond Alison" <Alison.Lamond@jacobs.com>

To:
"cacatua4service@tpg.com.au" <cacatua4service@tpg.com.au>
Cc:

Sent:
Wed, 11 Nov 2020 01:22:05 +0000
Subject:
Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station

Hello

Please find attached a letter detailing our invitation to register your interest for Aboriginal Cultural Heritage assessment for the Kurri Kurri Gas Fired Power Station Project. We look forward to your response, please note that registrations close **25 November 2020**.

Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist

+61 2 4979 2647 | + 61 417 980 800

alison.lamond@jacobs.com

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Lamond, Alison

From: Lower Hunter Aboriginal Incorporated <lowerhunterai@gmail.com>
Sent: Wednesday, 25 November 2020 3:41 PM
To: Lamond, Alison
Cc: ian.smith@snowyhydro.com.au
Subject: [EXTERNAL] EIO
Attachments: EIO for Kurri Kurri.pdf

Hi

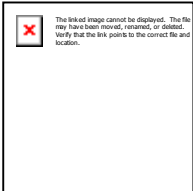
Attached is Expression of Interest for the Kurri Kurri Gas Fired Power Station Project.

--

Thank You David Ahoy
Sites Manager
LHAI
Mobile 0421329520

Lower Hunter Aboriginal Incorporated

5 Killara Drive
Cardiff South NSW 2285
ABN: 8192 4628 138
Email: lowerhunterai@gmail.com



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If you have received this email in error please notify the sender immediately.

Lamond, Alison

From: lilly carroll <didgengunawalclan@yahoo.com.au>
Sent: Saturday, 21 November 2020 10:26 AM
To: Lamond, Alison
Subject: [EXTERNAL] EOI

Hi Alison,

DNC would like to register an interest into the Gas fired power station at Kurri Kurri New South Wales

Kind regards

Paul Boyd& Lilly Carroll

Directors DNC

[Sent from Yahoo Mail for iPhone](#)

Lamond, Alison

From: Danny Franks <danny@tocomwall.com.au>
Sent: Monday, 23 November 2020 10:42 AM
To: Lamond, Alison
Subject: [EXTERNAL] Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station

Hi Alison,

Please accept this email as Tocomwall's ROI for the above-mentioned project.

Have a nice day.

regards,

Danny Franks

Cultural Heritage Manager
Tocomwall Pty Ltd
M: 0415226725



Breach of Confidentiality

This email and any files transmitted with it are confidential and intended solely for the use of the individual to whom they are addressed. If you have received this email in error please notify the sender. This message contains confidential information and is intended only for the individual named. If you are not the named addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited. Although the company has taken reasonable precautions to ensure no viruses are present in this email, the company cannot accept responsibility for any loss or damage arising from the use of this email or attachments.

Notice of Registration

To: Ian Smith (Snowy Hydro) C/O Alison Lamond
Archaeologist
Jacobs
Level 4, 12 Stewart Avenue
NEWCASTLE WEST NSW 2302
Email: alison.lamond@jacobs.com

I, Arthur Fletcher (NAME)
KAUWUL Pty LTD T/A Wannl (ORGANISATION)
Director - site officer (POSITION)
619 Main Rd Glendale 2285 (ADDRESS)

wish to be registered by Jacobs, on behalf of AGL as an Aboriginal Party to be consulted as part of the Kurri Kurri Gas Fired Power Station Project

I confirm that I am authorised to register on behalf of this organisation.

(Tick if relevant)

☐ I **DO NOT** wish for my details to be forwarded to OEH and/or the LALC pursuant to Section 4.1.6 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010).

My preferred method of communication is (Please tick preferred method and provide details below):

☒ Email ☐ Mail ☐ Fax ☐ Phone

Email Address: as wannl sites@gmail.com

Mailing address: 619 Main Rd Glendale 2285

Fax: 02 4954 7751

Phone: 0402146193 - 0249547751

Lamond, Alison


From: Taasha Layer <taasha@ungooroo.com.au>
Sent: Thursday, 12 November 2020 3:25 PM
To: Lamond, Alison
Cc: sites
Subject: [EXTERNAL] Notice of Registration for Allen Paget re Kurri Kurri Gas Fired Power Station Project
Attachments: Attached Image
Importance: High

Good Afternoon Alison,


Please see attached Ungooroo Aboriginal Corporation's Notice of Registration on behalf of Allen Paget for the Kurri Kurri Gas Fired Power Station Project. Please let us know if you require any further information, thanks

Let's SLOW THE SPREAD of COVID-19 together


Regularly wash your hands



Cough and sneeze into your elbow




Phone or video call to check-in on others




Keep a safe distance of 2 metres

2m = 2 big steps



COVID-19

visit health.nsw.gov.au for the latest information



Kind Regards
Taasha Layer | CEO

PHONE 02 6571 5111
MOBILE 0428 924 714
EMAIL taasha@ungooroo.com.au
WEB www.ungooroo.com.au

POST
PO Box 3095,
Singleton NSW 2330

LOCATION

Shop 1 – 4,
157-159 John Street
The Singleton Centre,
Singleton NSW 2330



Ungooroo Aboriginal Corporation acknowledges Aboriginal and Torres Strait Islander people as the Traditional Owners. We would like to acknowledge the Traditional Owners of our area, the Wanaruah People.

We pay our respect to the elders past, present and future for they hold the memories, traditions, culture and hope of Indigenous peoples in Australia.

Lamond, Alison

From: lilly carroll <didgengunawalclan@yahoo.com.au>
Sent: Wednesday, 11 November 2020 3:49 PM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Invitation to register for Aboriginal Cultural Heritage Gas fired Power Station

Hi Alison

DNC would like to register an interest into the project for ACHA for Kurri Kurri Gas fired power station

Kind regards

Paul Boyd & Lilly Carroll
Directors DNC

[Sent from Yahoo Mail for iPhone](#)

On Wednesday, November 11, 2020, 12:24 pm, Lamond, Alison <Alison.Lamond@jacobs.com> wrote:

Hello

Please find attached a letter detailing our invitation to register your interest for Aboriginal Cultural Heritage assessment for the Kurri Kurri Gas Fired Power Station Project. We look forward to your response, please note that registrations close 25 November 2020.

Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist

+61 2 4979 2647 | + 61 417 980 800

alison.lamond@jacobs.com

Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302| Australia

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Reinventing tomorrow.

■ I acknowledge the Traditional Owners of Country upon which I work, and pay my respects to them, their culture and their Elders past, present and future. ■

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Lamond, Alison

From: Deidre Perkins <dedemaree3@hotmail.com>
Sent: Thursday, 12 November 2020 3:04 PM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station

Hello Ally,
Hope all is well with you, I would like to register for the Kurri gas fired power station project please. Hope to see you soon
Love Deidre

Get [Outlook for Android](#)

From: Lamond, Alison <Alison.Lamond@jacobs.com>
Sent: Wednesday, November 11, 2020 12:24:14 PM
To: Deidre Perkins <dedemaree3@hotmail.com>
Subject: Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station

Hello
Please find attached a letter detailing our invitation to register your interest for Aboriginal Cultural Heritage assessment for the Kurri Kurri Gas Fired Power Station Project. We look forward to your response, please note that registrations close 25 November 2020.
Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist
+61 2 4979 2647 | + 61 417 980 800
alison.lamond@jacobs.com
Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302 | Australia

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Lamond, Alison

From: Dawn Edwards <dawnrichard@bigpond.com>
Sent: Wednesday, 11 November 2020 7:42 PM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station
Attachments: Notice of Registration.pdf

Hi Alison

Please find attached the Registration by Wonnarua Elders Council for the Aboriginal Cultural Heritage Assessment for Kurri Kurri Gas fired Power Station.

Thank you

Regards
Richard Edwards
Treasurer
Wonnarua Elders Council

----- Original Message -----

From: "Lamond, Alison" <Alison.Lamond@jacobs.com>
To: "dawnrichard@bigpond.com" <dawnrichard@bigpond.com>
Sent: Wednesday, 11 Nov, 2020 At 12:32 PM
Subject: Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station

Hello

Please find attached a letter detailing our invitation to register your interest for Aboriginal Cultural Heritage assessment for the Kurri Kurri Gas Fired Power Station Project. We look forward to your response, please note that registrations close 25 November 2020.

Regards



Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist

+61 2 4979 2647 | + 61 417 980 800

alison.lamond@jacobs.com

Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302 | Australia



 I acknowledge the Traditional Owners of Country upon which I work, and pay my respects to them, their culture and their Elders past, present and future. 

Lamond, Alison

From: Darleen Johnson <murrabidgeemullangari@yahoo.com.au>
Sent: Wednesday, 11 November 2020 3:34 PM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station
Attachments: BRW9C305B451BEF_002820.pdf

Hi Alison
Please find attached registration form, we look forward to working with you.
Kind regards
Darleen Johnson

On Wednesday, 11 November 2020, 12:29:24 pm AEDT, Lamond, Alison <alison.lamond@jacobs.com> wrote:

Hello

Please find attached a letter detailing our invitation to register your interest for Aboriginal Cultural Heritage assessment for the Kurri Kurri Gas Fired Power Station Project. We look forward to your response, please note that registrations close **25 November 2020**.

Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist

+61 2 4979 2647 | + 61 417 980 800

alison.lamond@jacobs.com

Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302| Australia



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Lamond, Alison

From: Steven Talbott <gomerito@outlook.com>
Sent: Wednesday, 11 November 2020 3:00 PM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station

Hi Alison

I would like to register for the above project. I have cultural knowledge of the area and would like to be included in all areas of the work.

Thanking you

Steven

From: Lamond, Alison <Alison.Lamond@jacobs.com>
Sent: Tuesday, 10 November 2020 4:33 PM
To: gomerito@outlook.com <gomerito@outlook.com>
Subject: Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station

Hello

Please find attached a letter detailing our invitation to register your interest for Aboriginal Cultural Heritage assessment for the Kurri Kurri Gas Fired Power Station Project. We look forward to your response, please note that registrations close 25 November 2020.

Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist
+61 2 4979 2647 | + 61 417 980 800
alison.lamond@jacobs.com
Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302 | Australia



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Reinventing tomorrow.

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Lamond, Alison

From: Carolyn .H <cazadirect@live.com>
Sent: Sunday, 15 November 2020 1:30 PM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station
Attachments: Notice of Registration (4).pdf; A1.WC2021.pdf; A1.PL2021.pdf

Follow Up Flag: Follow up
Flag Status: Flagged



INDIGENOUS SERVICES PTY LTD

Contact: Carolyn Hickey
M: 0411650057
E: Cazadirect@live.com
A: 10 Marie Pitt Place, Glenmore Park, NSW 2745
ACN: 639 868 876
ABN: 31 639 868 876

Hi Alison,
Please find attached the completed form for Registration, I have also attached A1's Insurances.
Kind Regards
Carolyn Hickey

From: Lamond, Alison <Alison.Lamond@jacobs.com>
Sent: Wednesday, 11 November 2020 12:18 PM
To: Cazadirect@live.com <Cazadirect@live.com>
Subject: Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station

Hello
Please find attached a letter detailing our invitation to register your interest for Aboriginal Cultural Heritage assessment for the Kurri Kurri Gas Fired Power Station Project. We look forward to your response, please note that registrations close 25 November 2020.
Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist
+61 2 4979 2647 | + 61 417 980 800
alison.lamond@jacobs.com
Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302 | Australia

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Reinventing tomorrow.

Lamond, Alison

From: WIDESCOPE . <widescope.group@live.com>
Sent: Monday, 16 November 2020 11:21 AM
To: Lamond, Alison
Subject: [EXTERNAL] RE: Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station
Attachments: Notice of Registration[17590].pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Alison,

Please register my interest in the Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station

Thank you
Steven Hickey

From: [Lamond, Alison](#)
Sent: Wednesday, 11 November 2020 12:31 PM
To: widescope.group@live.com
Subject: Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station

Hello

Please find attached a letter detailing our invitation to register your interest for Aboriginal Cultural Heritage assessment for the Kurri Kurri Gas Fired Power Station Project. We look forward to your response, please note that registrations close 25 November 2020.

Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist
+61 2 4979 2647 | + 61 417 980 800
alison.lamond@jacobs.com
Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302| Australia

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Reinventing tomorrow.

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Lamond, Alison

From: Kerrie Brauer [REDACTED]
Sent: Wednesday, 18 November 2020 12:39 PM
To: Lamond, Alison
Subject: [EXTERNAL] RE: Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station
Attachments: ATOAC Notice of Registration.pdf

Hi Alison,

Thank you for your email.

Please find attached our Notice of Registration for the Kuri Kuri Gas Fired Power Station Project.

If you require any further information please do not hesitate in contacting me.

Kind regards,
Kerrie Brauer



Kerrie Brauer | Director | Administration | Awabakal Traditional Owners Aboriginal Corporation

[REDACTED]

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From: Lamond, Alison [mailto:Alison.Lamond@jacobs.com]
Sent: Wednesday, 11 November 2020 12:22 PM
To: Kerrie Brauer
Subject: Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station

Hello

Please find attached a letter detailing our invitation to register your interest for Aboriginal Cultural Heritage assessment for the Kurri Kurri Gas Fired Power Station Project. We look forward to your response, please note that registrations close 25 November 2020.

Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist
+61 2 4979 2647 | + 61 417 980 800
alison.lamond@jacobs.com
Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302| Australia



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Lamond, Alison

From: Lilly Carroll <didgengunawalclan@yahoo.com.au>
Sent: Thursday, 12 November 2020 5:24 PM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Invitation to register for Aboriginal Cultural Heritage assessment for Kurri Kurri Gas fired Power Station
Attachments: image-12-11-20-05-22.heic

Hi Alison

Just sending through notice of registration
Form

Kind regards DNC
Paul Boyd & Lilly Carroll
0426823944

Sent from myMail for iOS

Wednesday, 11 November 2020, 12:24 pm +1100 from Alison.Lamond@jacobs.com <Alison.Lamond@jacobs.com>:

Hello

Please find attached a letter detailing our invitation to register your interest for Aboriginal Cultural Heritage assessment for the Kurri Kurri Gas Fired Power Station Project. We look forward to your response, please note that registrations close 25 November 2020.

Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist

+61 2 4979 2647 | + 61 417 980 800

alison.lamond@jacobs.com

Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302| Australia

Jacobs Challenging today.
Reinventing tomorrow.

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Lamond, Alison

From: Des Hickey <deshickey@bigpond.com>
Sent: Sunday, 15 November 2020 10:23 PM
To: Lamond, Alison
Subject: [EXTERNAL] RE: Invitation to register for Aboriginal Cultural Heritage assessmentfor Kurri Kurri Gas fired Power Station
Attachments: notice of registration.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Alison
Please find attachment notice of registration for project

Thanks'
Des

Sent from [Mail](#) for Windows 10

From: [Lamond, Alison](#)
Sent: Wednesday, 11 November 2020 12:31 PM
To: deshickey@bigpond.com
Subject: Invitation to register for Aboriginal Cultural Heritage assessmentfor Kurri Kurri Gas fired Power Station

Hello
Please find attached a letter detailing our invitation to register your interest for Aboriginal Cultural Heritage assessment for the Kurri Kurri Gas Fired Power Station Project. We look forward to your response, please note that registrations close 25 November 2020.
Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist
+61 2 4979 2647 | + 61 417 980 800
alison.lamond@jacobs.com
Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302| Australia

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Reinventing tomorrow.

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Lamond, Alison

From: Tara Dever <ceo@mindaribbalalc.org>
Sent: Friday, 13 November 2020 2:59 PM
To: Lamond, Alison
Subject: [EXTERNAL] RE: Seeking Aboriginal knowledge holders for an Aboriginal cultural heritage assessment in Kurri Kurri NSW

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Alison,

The Mindaribba LALC would like to register for this job and as all of the regular groups that we would normally nominate have been advised of the project so at this stage there is no need for us to nominate.

It has also come to my attention that Snowy Hydro do not have a Reconciliation Action Plan and as the Mindaribba LALC is a large landholder adjacent to the proposed site I would like to request that you please provide me details of the Project Lead or someone within the Scheme that I can contact in relation to consultation.

Warm Regards

Tara Dever
Chief Executive Officer
Mindaribba Local Aboriginal Land Council
PO Box 401, East Maitland, NSW 2323
Ph: +6102 4015 7000
M: 0423 770 173



I acknowledge the Traditional Owners and Custodians of the land I work on, the Wonnarua People.
I pay my respect to all Aboriginal Elders Past, Present and Emerging.

"As an Aboriginal woman, my heart breaks every time they unfurl the flag, folded to gather dust 'till we're deemed appropriate to be recognised again". Unknown Author

From: Lamond, Alison <Alison.Lamond@jacobs.com>
Sent: Monday, 2 November 2020 3:27 PM
To: Tara Dever <ceo@mindaribbalalc.org>
Subject: Seeking Aboriginal knowledge holders for an Aboriginal cultural heritage assessment in Kurri Kurri NSW

Hello Tara

Please find attached a letter detailing our request for Aboriginal knowledge holders to assist Snowy Hydro to prepare a cultural heritage assessment report for a propose gas fired power station at Kurri Kurri.

Please do not hesitate to contact me if you need any further information

Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist
+61 2 4979 2647 | + 61 417 980 800
alison.lamond@jacobs.com
Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302| Australia

Lamond, Alison

From: Shaun Carroll <Merrigarn@hotmail.com>
Sent: Wednesday, 11 November 2020 3:52 PM
To: Lamond, Alison
Subject: [EXTERNAL] registration - Kurri Kurri Gas fired power station project
Attachments: BRW9C305B451BEF_002822.pdf

Hi Alison
Please see attached form.
Thanks
Shaun Carroll

Sent from [Mail](#) for Windows 10

Lamond, Alison

From: jesse johnson <muragadi@yahoo.com.au>
Sent: Wednesday, 11 November 2020 3:38 PM
To: Lamond, Alison
Subject: [EXTERNAL] regsitration - Kurri Kurri Gas fired power station project
Attachments: BRW9C305B451BEF_002821.pdf

Dear Alison
Please see attached form to register for the above project.
Kind regards
Jesse Johnson
0418970389



Kurri Kurri gas fired power station
Aboriginal Cultural Heritage Assessment methodology

Draft | v1

27 November 2020

Snowy Hydro

Kurri Kurri gas fired power station

Project No: IS354500
Document Title: Aboriginal Cultural Heritage Assessment methodology
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Client Name: Snowy Hydro
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Project Manager: Karl Ivanusic
Author: Andy Roberts and Alison Lamond
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Jacobs Group (Australia) Pty Limited
ABN 37 001 024 095
Level 7, 177 Pacific Highway
North Sydney NSW 2060 Australia
PO Box 632 North Sydney
NSW 2059 Australia
T +61 2 9928 2100
F +61 2 9928 2444
www.jacobs.com

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Appendix A. AHIMS Search Results

1. Introduction

1.1 Background and purpose of this document

Snowy Hydro Limited (Snowy Hydro) is proposing to construct and operate a new gas-fired power station at Loxford, approximately 3 km north of Kurri Kurri, within the Cessnock City Council local government area. The Proposal site is at the location of the former Hydro Aluminium Kurri Kurri Aluminium Smelter. The Proposal comprises a gas fired power station and associated electrical switchyard.

Jacobs, on behalf of Snowy Hydro is currently developing an Environmental Impact Statement (EIS) for the Proposal, assessing potential impacts of the Proposal's construction and operation in accordance with Division 5.2 of the *NSW Environmental Planning and Assessment Act 1979* (EP&A Act).

This document presents the proposed method for the assessment of Aboriginal cultural heritage through the archaeological survey of the Proposal site (i.e. disturbance footprint). The results of this assessment will subsequently be presented in an Aboriginal Cultural Heritage Assessment Report (ACHAR).

This proposed methodology has been designed to conform to the requirements of the following advisory documents and guidelines:

- *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales* (OEH, 2011).
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010b)
- *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (Part 6 National Parks and Wildlife Act, 1974)* (DECCW, 2010a)

1.2 Objective of community consultation

Consultation provides the Aboriginal community the opportunity to improve assessment results by:

- Sharing relevant information about the cultural significance and values of Aboriginal object(s) and/or place(s).
- Contributing to the assessment of cultural and scientific significance of Aboriginal object(s) and/or place(s).
- Reviewing and commenting on the proposed methods of assessing cultural heritage within the Proposal site (this document).
- Contributing to the development of cultural heritage management options and recommendations for Aboriginal object(s) and/or place(s) within the Proposal site.
- Commenting and providing feedback on the draft Aboriginal Cultural Heritage Assessment Report (ACHAR) before it is submitted to the relevant government agency.

2. Project information

2.1 The Proposal site

The Proposal site is the site of a former aluminium smelter and is located at Loxford, approximately 3 km north of Kurri Kurri and approximately 1.6 km south of Wentworth Swamps (refer to **Figure 2.1**). A tributary of Black Waterholes creek is located west of the Proposal site and Swamp creek is located approximately 900 metres to the east.

As shown in **Figure 2.2**, the Proposal site comprises three component parts:

- Area 1 – proposed location for electrical switchyard (approximately 1.29 ha)
- Area 2 – proposed location for power station (approximately 6.81 ha)
- Area 3 – buffer zone (approximately 3.73 ha).

Areas 2 and 3 are entirely within disturbed land that has recently undergone demolition of structures associated with the former aluminium smelter, and an extensive land remediation program. Area 1 has also been subject to previous disturbance, being the location of the former aluminium smelter electrical switchyard (now decommissioned and undergoing demolition and remediation). However, the northern and eastern edges of Area 1 are not disturbed, and remains partially covered in vegetation.

2.2 The Proposal

The Proposal includes:

- Construction and operation of a gas fired power station comprising two F-Class Open Cycle Gas Turbine (OCGT), each in the order of 320 MW to 380 MW. The exact turbine model, as well as transformers and ancillary plant would be confirmed at a later stage of detailed design.
- A132 kV electrical switchyard immediately adjacent to the power station.

A gas pipeline will also be constructed to supply the proposed power station. However, the gas pipeline will be subject to a separate planning approvals process, to be undertaken by others. Any investigation or assessment of Aboriginal cultural heritage associated with the gas pipeline will be undertaken as part of that process, in accordance with the requirements of the legislation and guidelines outlined in Section 1.1.

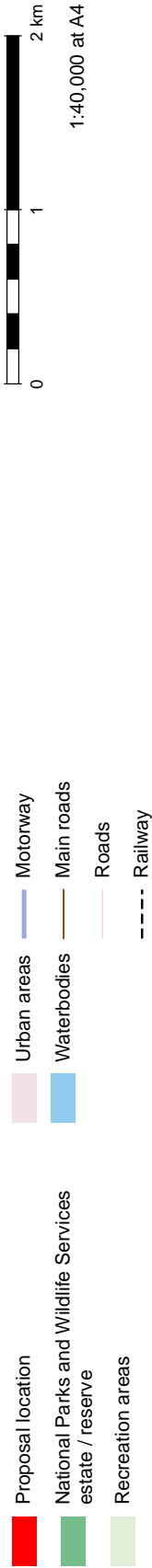
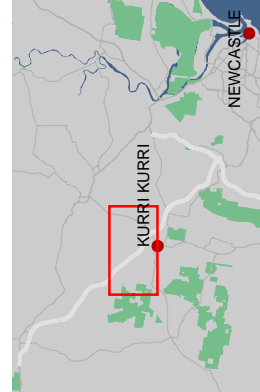
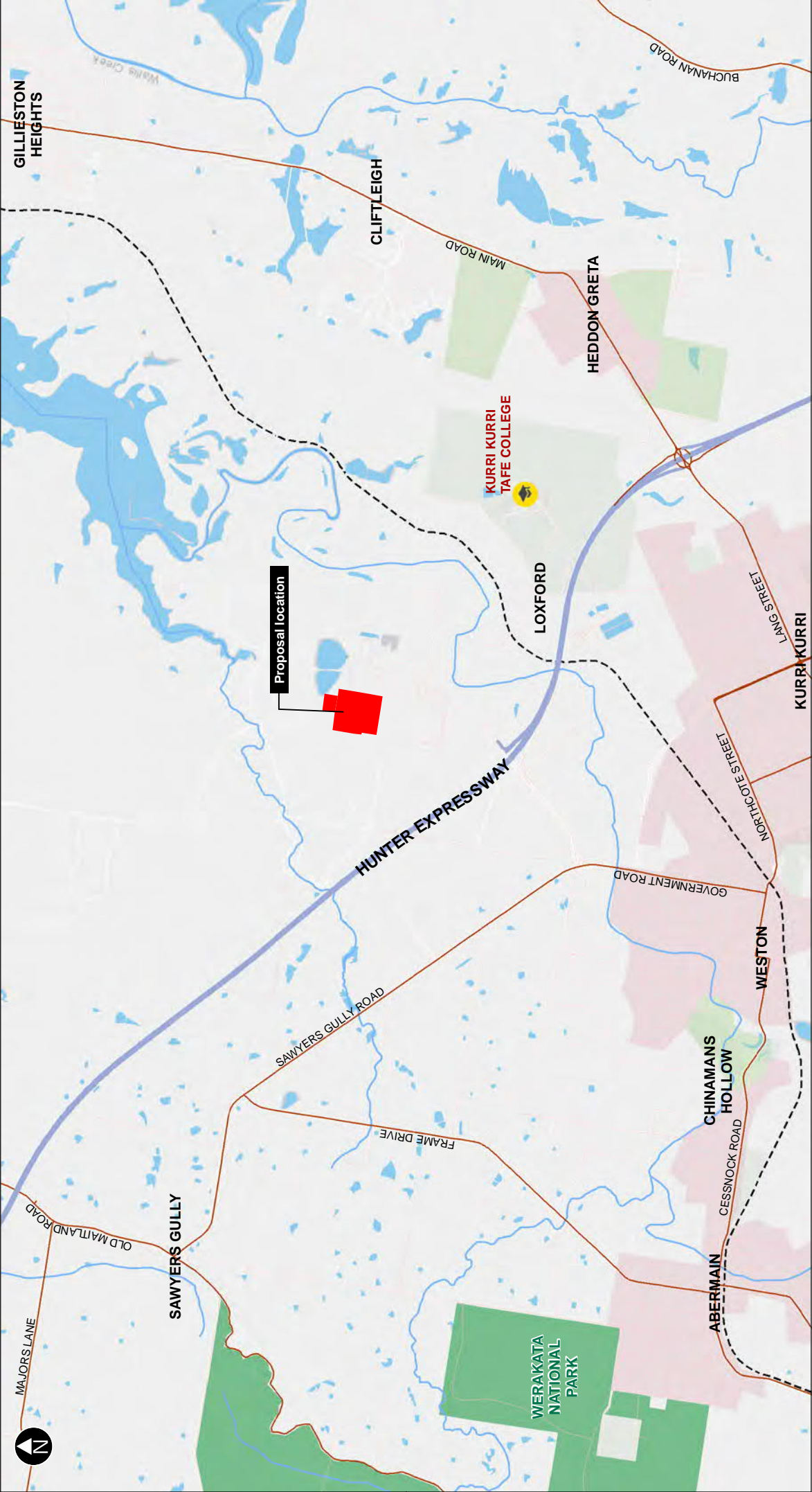


Figure 2-1 Project regional context - Kurri Kurri Gas Fired Power Station

2.3 Aboriginal Heritage Information Management System (AHIMS) searches

Alison Lamond (Senior archaeologist, Jacobs) carried out a search of the Aboriginal Heritage Information Management System (AHIMS) on 22 October 2020. The Proposal site and a 2.5 km buffer zone was used as the search area. This buffer area is not proposed for impact it is included to provide information on the archaeological context of the area.

There are 78 previously recorded sites identified in the AHIMS search, five of which were recorded as being in close proximity to the Proposal site (within 300 metres) (refer to **Table 2.1** and **Figure 2.2**). The complete list of AHIMS site records is provided in **Appendix A**.

Table 2.1: AHIMS Search Results

Site Type	Description	Number of Sites
Isolated Find	A single stone artefact	20
Artefact Scatter	Multiple stone artefacts	54
PAD	Potential subsurface archaeological deposit	2
Artefact Scatter with PAD	Multiple stone artefacts visible on the surface with a potential subsurface archaeological deposit	2

Table 2.2: AHIMS Sites close to project area

AHIMS site ID	Site Name	Site Validity	Site Type	Approx. distance from the Proposal site
37-6-3969	Hydro-IA35-15	Valid	Artefact Scatter	250 m
37-6-3872	Hydro PAD 1	Valid	PAD	50 m
37-6-3065	Hydro-AS22-14	Valid	Artefact Scatter	150 m
37-6-3068	Hydro-AS26-14	Valid	Artefact Scatter	170 m
45-3-3387	KK04	Valid	Artefact Scatter with PAD	250 m

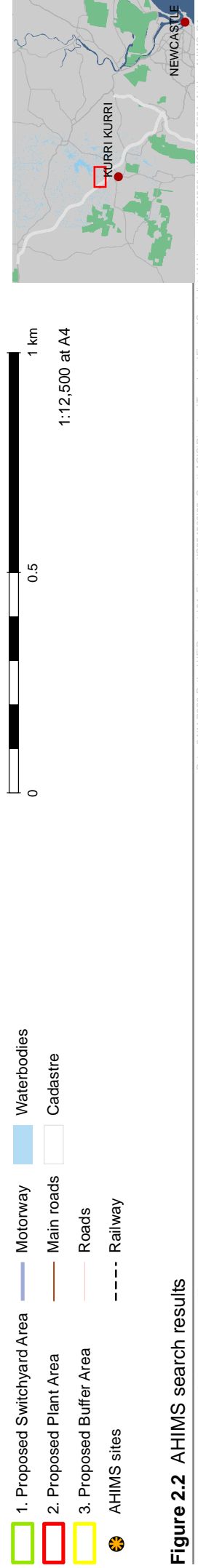


Figure 2.2 AHIMS search results

3. Proposed methodology for the cultural heritage assessment

3.1 Aboriginal Cultural Heritage Assessment

The Aboriginal cultural heritage assessment will involve the following tasks:

- Desktop assessment of what is known about the archaeological resource of the Proposal site and its surrounds from previous research.
- Development of a method for archaeological survey (this document).
- Survey of the Proposal site.
- Preparation of an Aboriginal Cultural Heritage Assessment Report (ACHAR).
 - The report will satisfy the requirements of the *Code of Practice* (DECCW, 2010b), the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW, 2010a) and the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH, 2011).
 - The report will:
 - Synthesise the results of technical investigations, including the desktop assessment and archaeological survey
 - Include an assessment of the significance of any Aboriginal objects and record any Aboriginal cultural heritage values identified
 - Include an impact assessment and provide management and mitigations measures to inform any AHIP application as required.
- RAPs will have an opportunity to review each report. Information, comments and feedback received from RAPs will be incorporated into the final version of the ACHAR.
- Site records on the AHIMS database will be updated as necessary.

3.2 Aboriginal community input points during the assessment process

Input and feedback can be provided by RAPs at any time throughout the assessment process. Jacobs will specifically seek input and feedback from RAPs at several points during the process (following procedures outlined in DECCW, 2010a):

- During Stage 2 and 3 - Initial presentation of information about the Proposal by providing RAPs with the draft proposed methodology (this document). RAPs are invited to provide feedback on the proposed methodology, and to identify cultural heritage values associated with the Proposal site.
- During site survey – Opportunistic discussion and feedback while surveying the Proposal site.
- During Stage 4 - Providing RAPs with the draft Aboriginal Cultural Heritage Assessment Report. RAPs will be invited to provide feedback on the report, and any further information they wish to be included.

3.3 Archaeological Field Survey

The field survey will systematically investigate the Proposal site.

The ground survey team will consist of two archaeologists as well as Aboriginal representatives. The field survey is aimed at locating Aboriginal objects and areas of Potential Archaeological Deposit (PAD) with the potential to contain subsurface archaeological material.

The survey will investigate the Proposal site in full. No sampling of these areas will be employed. Areas that are assessed by field teams on the ground as likely having no potential for archaeological material to be present, for example because of previous impacts and ground disturbance, will not be surveyed. The decision to exclude these areas would be made in the field by consensus of all field team members.

Where archaeological sites or areas of PAD are encountered, the following attributes will be recorded:

- Site location (single point for isolated artefacts, or as a boundary drawn around larger sites such as artefact scatters);
- Site type;
- Landform context;
- Vegetation type;
- Land use;
- Categories of features and artefacts present on the site;
- Orientation/aspect of the site;
- Observations on individual stone artefacts: stone material type; artefact type; platform surface; platform type; termination type; cross-section category; length, width and thickness;
- Observations on modified trees: living status of tree; condition of tree; condition of scar; tree species; length and width of scar; height above ground; presence of regrowth; depth of scar (height of regrowth); shape of scar; orientation of scar; presence/absence of axe marks;
- Observations of other specific site types (grinding groove, art, shell scatter, closed site) following the requirements of Heritage NSW site recording forms;
- Photographs of the site and individual site features/artefacts will be taken as judged necessary by the field team;
- Any other comments or information as judged relevant by the field team.

Any previously recorded sites within or near the Proposal site (sufficiently close to be at risk of inadvertent impact) will be searched for during the survey. If found, these sites will be recorded following the same procedure as newly identified sites. If survey teams are unable to find previously recorded sites, this will be noted in the report.

The survey will also record land disturbance, survey coverage variables (ground exposure and archaeological visibility) and landform types across the Proposal site.

Data will be captured using iPad notebooks, handheld GPS, and compact digital camera. Standard measuring tools such as tape measures and callipers will be used.

3.4 Survey logistics and requirements for Aboriginal participants

At least five days prior to fieldwork, Jacobs will contact RAPs with details of the fieldwork schedule, including meeting location, start and finish times, and expected fieldwork duration. Details of relevant inductions and safety regulations applying to the areas of the former aluminium smelter site being accessed will also be communicated to RAPs at that time.

We note that due to the Covid-19 pandemic and associated government guidelines the procedure for undertaking archaeological site surveys to ensure the health and safety of all officers will be applied. Current restrictions and safety concerns require the implementation of a range of safety measures to limit the risk of COVID-19 transmission.

3.5 Sensitive cultural information management protocol

RAPs have the opportunity to provide Jacobs with information on the Proposal site and the surrounding region, including information on cultural heritage values. Information will be accepted at any point during the cultural heritage assessment process prior to the finalisation of the ACHAR (see section 3.2).

It is possible that during this consultation process, RAPs will provide sensitive cultural information to which access needs to be restricted.

In the event that such information is supplied, the RAP supplying the information should state to Jacobs how they wish that information to be treated, and how access to the information should be restricted.

Jacobs will follow the stated wishes provided by the RAP group when managing and using information provided to Jacobs. All stated restrictions of access, communication and publication of the information will be followed. These might include:

- Restrictions on reproducing the information (in whole or in part) in reports
- Restrictions on reproducing the information in reports provided to different audiences (for example, the version provided to the client, the version provided to OEH and the AHIMS database)
- Restrictions on communication of the information in other ways
- Restrictions on the location/storage of the information
- Other required processes relating to handling the information
- Any names and contact details of persons authorised within the relevant Aboriginal group to make decisions concerning the information, and their degree of authorisation.
- Any details of any consent given in accordance with customary law
- Any restrictions on access to and use of the information by RAPs.

Please consider the above list when providing your statement of requirements regarding any culturally sensitive information.

3.6 Contact details

For more information and to discuss this project, please do not hesitate to contact:

Alison Lamond

Senior Archaeologist

Jacobs

Level 4, 12 Stewart Avenue, Newcastle West, NSW 2302.

Alison.lamond@jacobs.com

0417 980 800

Appendix A. AHIMS Search Results

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-0865	KK-IF-2	GDA	56	358141	6369492	Open site	Valid	Artefact : -	Isolated Find	98174,102135
37-6-0866	Contact KK-IF-1	Recorders GDA	Mrs.Robynne Mills, Miss.Nicola Roche	6369780	Open site	Valid	Valid	Artefact : -	Isolated Find	98174,102231
37-6-1325	Contact Swamp Creek RTA 10 IF (SWC RTA 10IF)	Recorders AGD	Mrs.Robynne Mills, Miss.Nicola Roche	6370271	Open site	Valid	Valid	Artefact : 1	Isolated Find	98174,102231
37-6-1341	Contact Black Waterholes Creek RTA 1 IF	Recorders AGD	Umwelt (Australia) Pty Limited - Individual users, Leila McAdam	6371730	Open site	Valid	Valid	Artefact : 1	Isolated Find	98174,102231
37-6-1342	Contact Black Waterholes Creek RTA 2 IF	Recorders AGD	Umwelt (Australia) Pty Limited - Individual users, Leila McAdam	6372208	Open site	Valid	Valid	Artefact : 1	Isolated Find	98174,102231
37-6-1343	Contact Black Waterholes Creek RTA 3 IF	Recorders AGD	Umwelt (Australia) Pty Limited - Individual users, Leila McAdam	6371108	Open site	Valid	Valid	Artefact : 1	Isolated Find	98174,102231
37-6-1344	Contact Black Waterholes Creek RTA 4 IF (BWC RTA 4 IF)	Recorders AGD	Umwelt (Australia) Pty Limited - Individual users, Leila McAdam	6372102	Open site	Valid	Valid	Artefact : 1	Isolated Find	98174,102231
37-6-1355	Contact Swamp Creek RTA 3	Recorders AGD	Umwelt (Australia) Pty Limited - Individual users, Leila McAdam	6369135	Open site	Valid	Valid	Artefact : 10	Isolated Find	98174,102231
37-6-1356	Contact Swamp Creek RTA 4	Recorders AGD	Umwelt (Australia) Pty Limited - Individual users, Leila McAdam	6370688	Open site	Valid	Valid	Artefact : 4	Isolated Find	98174,102231
37-6-1357	Contact Swamp Creek RTA 5 IF	Recorders AGD	Umwelt (Australia) Pty Limited - Individual users, Leila McAdam	6368993	Open site	Valid	Valid	Artefact : 1	Isolated Find	98174,102231
37-6-1358	Contact Swamp Creek RTA 6 IF	Recorders AGD	Umwelt (Australia) Pty Limited - Individual users, Leila McAdam	6369057	Open site	Valid	Valid	Artefact : 1	Isolated Find	98174,102231
37-6-1359	Contact Swamp Creek RTA 7 IF	Recorders AGD	Umwelt (Australia) Pty Limited - Individual users, Leila McAdam	6369259	Open site	Valid	Valid	Artefact : 1	Isolated Find	98174,102231
37-6-1360	Contact Swamp Creek RTA 8 IF	Recorders AGD	Umwelt (Australia) Pty Limited - Individual users, Leila McAdam	6370282	Open site	Valid	Valid	Artefact : 1	Isolated Find	98174,102231
37-6-1361	Contact Swamp Creek RTA 9	Recorders AGD	Umwelt (Australia) Pty Limited - Individual users, Leila McAdam	6370549	Open site	Valid	Valid	Artefact : 7	Isolated Find	98174,102231
37-6-1362	Contact Swamp Creek RTA 11 IF (formerly PAD9 Swamp Creek)	Recorders AGD	Umwelt (Australia) Pty Limited - Individual users, Leila McAdam	6369700	Open site	Valid	Valid	Potential Archaeological Deposit (PAD) : 1, Artefact : -	Isolated Find	98174,102231
37-6-1363	Contact PAD11 Black Waterholes Creek	Recorders AGD	Umwelt (Australia) Pty Limited - Individual users, Leila McAdam	6371356	Open site	Valid	Valid	Potential Archaeological Deposit (PAD) : 1	Isolated Find	98174,102231

Report generated by AHIMS Web Service on 22/10/2020 for Alison Lamond for the following area at Datum : GDA, Zone : 56, Eastings : 354838 - 360337, Northings : 6368468 - 6374106 with a Buffer of 0 meters. Additional Info : Due diligence, Number of Aboriginal sites and Aboriginal objects found is 78

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : Snowyhydro Kurri 2.5km bu
Client Service ID : 544459

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-1957	Contact	Recorders	Umwelt (Australia)	Pty Limited - Individual users,Leila McAdam						
	KK09	GDA	56	358372	6371638	Open site	Valid	Artefact : 1	2096	102231
37-6-1958	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KK10	GDA	56	357407	6371800	Open site	Valid	Artefact : 3	3203	102231
37-6-1959	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KK11	GDA	56	357079	6371849	Open site	Valid	Artefact : 1	3203	102231
37-6-1960	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KK12	GDA	56	356887	6371887	Open site	Valid	Artefact : 1	3203	102231
37-6-2004	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KR01	GDA	56	357959	6370106	Open site	Valid	Artefact : -	3203	
37-6-2005	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KR02	GDA	56	357528	6370404	Open site	Valid	Artefact : -	3201	
37-6-2006	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KR03	GDA	56	357491	6370454	Open site	Valid	Artefact : -	3201	
37-6-2007	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KR04	GDA	56	357367	6370539	Open site	Valid	Artefact : -	3201	
37-6-2008	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KR05	GDA	56	357171	6370683	Open site	Valid	Artefact : -	3201	
37-6-2009	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KR06	GDA	56	356187	6371481	Open site	Valid	Artefact : -	3201	102231
37-6-1961	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KK13	GDA	56	356713	6372765	Open site	Valid	Artefact : 1	3201	102231
37-6-1962	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KK14	GDA	56	356727	6372857	Open site	Valid	Artefact : 1	3203	102231
37-6-1963	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KK15	GDA	56	356790	6373144	Open site	Valid	Artefact : 1	3203	102231
37-6-1964	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KK16	GDA	56	356790	6373144	Open site	Valid	Artefact : -		102231
38-4-1149	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KK01 (Beresfield)	GDA	56	359679	6369869	Open site	Valid	Artefact : 3		
38-4-1150	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KK02 (Beresfield)	GDA	56	359819	6369944	Open site	Valid	Artefact : 3	3151	
37-6-1953	Contact	Recorders	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							
	KK03	GDA	56	359355	6370790	Open site	Valid	Artefact : 10	3151	

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
45-3-3387	Contact KK04 (Wyong)	Recorders GDA	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah		6371717	Open site	Valid	Artefact : 103, Potential Archaeological Deposit (PAD) : -	3203	
			56	357942	6371717	Open site				
37-6-1954	Contact KK05	Recorders GDA	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah		6371627	Open site	Valid	Artefact : 17	3151,3203	102231
			56	358577	6371627	Open site				
37-6-1955	Contact KK07	Recorders GDA	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah		6372396	Open site	Valid	Artefact : 2	3203	102231
			56	356742	6372396	Open site				
37-6-1956	Contact KK08	Recorders GDA	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah		6370657	Open site	Destroyed	Artefact : 1	3151,3203	103000,10300
			56	359497	6370657	Open site				1
38-4-1714	Contact Hydro-AS05-14	Recorders GDA	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah		6373012	Open site	Valid	Artefact : -	3203,3640	
			56	360256	6373012	Open site				
38-4-1715	Contact Hydro-AS06-14	Recorders GDA	Andrew McLaren		6373142	Open site	Valid	Artefact : -		
			56	359994	6373142	Open site				
37-6-3050	Contact Hydro-AS07-14	Recorders GDA	Andrew McLaren		6372353	Open site	Valid	Artefact : -		
			56	359003	6372353	Open site				
37-6-3051	Contact Hydro-AS08-14	Recorders GDA	Andrew McLaren		6372585	Open site	Valid	Artefact : -		
			56	358265	6372585	Open site				
37-6-3052	Contact Hydro-AS09-14	Recorders GDA	Andrew McLaren		6372339	Open site	Valid	Artefact : -		
			56	358412	6372339	Open site				
37-6-3053	Contact Hydro-AS10-14	Recorders GDA	Andrew McLaren		6372326	Open site	Valid	Artefact : -		
			56	358096	6372326	Open site				
37-6-3054	Contact Hydro-AS11-14	Recorders GDA	Andrew McLaren		6372468	Open site	Valid	Artefact : -		
			56	357628	6372468	Open site				
37-6-3055	Contact Hydro-AS12-14	Recorders GDA	Andrew McLaren		6372186	Open site	Valid	Artefact : -		
			56	357175	6372186	Open site				
37-6-3056	Contact Hydro-AS13-14	Recorders GDA	Andrew McLaren		6372130	Open site	Valid	Artefact : -		
			56	357378	6372130	Open site				
37-6-3057	Contact Hydro-AS14-14	Recorders GDA	Andrew McLaren		6372247	Open site	Valid	Artefact : -		
			56	357432	6372247	Open site				
37-6-3058	Contact Hydro-AS15-14	Recorders GDA	Andrew McLaren		6372127	Open site	Valid	Artefact : -		
			56	357565	6372127	Open site				
37-6-3061	Contact Hydro-AS18-14	Recorders GDA	Andrew McLaren		6372025	Open site	Valid	Artefact : -		
			56	358062	6372025	Open site				

Report generated by AHIMS Web Service on 22/10/2020 for Alison Lamond for the following area at Datum :GDA, Zone : 56, Eastings : 354838 - 360337, Northings : 6368468 - 6374106 with a Buffer of 0 meters. Additional Info : Due diligence, Number of Aboriginal sites and Aboriginal objects found is 78

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Client Service ID : 544459

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-3062	Contact Hydro-AS19-14	Recorders GDA	Andrew McLaren	56 357827	6371996	Open site	Valid	Artefact : -	Permits	
37-6-3063	Contact Hydro-AS20-14	Recorders GDA	Andrew McLaren	56 358459	6371828	Open site	Valid	Artefact : -	Permits	
37-6-3064	Contact Hydro-AS21-14	Recorders GDA	Andrew McLaren	56 357637	6371864	Open site	Valid	Artefact : -	Permits	
37-6-3065	Contact Hydro-AS22-14	Recorders GDA	Andrew McLaren	56 357458	6371685	Open site	Valid	Artefact : -	Permits	
37-6-3059	Contact Hydro-AS16-14	Recorders GDA	Andrew McLaren	56 357531	6372061	Open site	Valid	Artefact : -	Permits	
37-6-3060	Contact Hydro-AS17-14	Recorders GDA	Andrew McLaren	56 357897	6372119	Open site	Valid	Artefact : -	Permits	
38-4-1712	Contact Hydro-AS03-14	Recorders GDA	Andrew McLaren	56 360138	6373383	Open site	Valid	Artefact : -	Permits	
38-4-1713	Contact Hydro-AS04-14	Recorders GDA	Andrew McLaren	56 360085	6373261	Open site	Valid	Artefact : -	Permits	
37-6-3066	Contact Hydro-AS24-14	Recorders GDA	Andrew McLaren	56 355859	6372140	Open site	Valid	Artefact : -	Permits	
37-6-3067	Contact Hydro-AS25-14	Recorders GDA	Andrew McLaren	56 356555	6371753	Open site	Valid	Artefact : -	Permits	
37-6-3068	Contact Hydro-AS26-14	Recorders GDA	Andrew McLaren	56 357247	6371141	Open site	Valid	Artefact : -	Permits	
37-6-3069	Contact Hydro-AS27-14	Recorders GDA	McLachlan Thorpe Partners	56 357148	6370939	Open site	Valid	Artefact : -	Permits	
37-6-3070	Contact Hydro-AS28-14	Recorders GDA	Andrew McLaren	56 357219	6370703	Open site	Valid	Artefact : -	Permits	
37-6-3071	Contact Hydro-AS29-14	Recorders GDA	Andrew McLaren	56 358225	6371002	Open site	Valid	Artefact : -	Permits	
37-6-3072	Contact Hydro-AS30-14	Recorders GDA	Andrew McLaren	56 358420	6371046	Open site	Valid	Artefact : -	Permits	
37-6-3073	Contact Hydro-AS31-14	Recorders GDA	Andrew McLaren	56 359541	6371256	Open site	Valid	Artefact : -	Permits	

Report generated by AHIMS Web Service on 22/10/2020 for Alison Lamond for the following area at Datum :GDA, Zone : 56, Eastings : 354838 - 360337, Northings : 6368468 - 6374106 with a Buffer of 0 meters. Additional Info : Due diligence, Number of Aboriginal sites and Aboriginal objects found is 78

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

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-3872	Hydro PAD 1	GDA	56	357445	6371592	Open site	Valid	Potential Archaeological Deposit (PAD) :-		
37-6-3926	RPS HG01	Contact	AECOM Australia Pty Ltd - Sydney,Doctor.Andrew Peter McLaren							
		GDA	56	359573	6369800	Open site	Destroyed	Artefact : 1	Permits	
37-6-0267	Kurri Kurri No.1;	Contact	RPS Australia East Pty Ltd - Hamilton,RPS Australia East Pty Ltd - York Street Syd'n							
		AGD	56	359420	6369460	Open site	Valid	Artefact : -	Permits	4597
37-6-0268	Kurri Kurri No 2.;	Contact	A Djekic							
		AGD	56	359450	6369680	Open site	Valid	Artefact : -	Permits	Open Camp Site
37-6-0269	Kurri Kurri No.3;	Contact	A Djekic							
		AGD	56	359480	6369790	Open site	Valid	Artefact : -	Permits	Open Camp Site
37-6-0270	No. 4 Kurri	Contact	A Djekic							
		GDA	56	359490	6369810	Closed site	Destroyed	Artefact : -	Permits	Open Camp Site
37-6-0271	Kurri Kurri No.5;	Contact	A Djekic,RPS Australia East Pty Ltd - York Street Sydney ,Mrs.Amanda Crick							
		AGD	56	359520	6369890	Open site	Valid	Artefact : -	Permits	4597
37-6-1644	Swamp Creek Catchment 5	Contact	A Djekic							
		AGD	56	356949	6370574	Open site	Valid	Artefact : 2	Permits	Open Camp Site
37-6-1645	Swamp Creek Catchment 4	Contact	Ms.Tudur Llwyd Davies							
		AGD	56	357603	6369908	Open site	Valid	Artefact : 1	Permits	2520,2660
37-6-1650	Northern Swamp Tributaries 4	Contact	Ms.Tudur Llwyd Davies							
		AGD	56	356724	6371757	Open site	Valid	Artefact : 29	Permits	2520,2660
37-6-1652	Northern Swamp Tributaries 2	Contact	Ms.Tudur Llwyd Davies							
		AGD	56	356637	6372207	Open site	Valid	Artefact : 2	Permits	100062,10223
37-6-3794	Kurri Kurri SC01	Contact	Ms.Tudur Llwyd Davies							
		GDA	56	357447	6369296	Open site	Valid	Artefact : -	Permits	2520,2660,3151,3203
37-6-3969	Hydro-IA35-15	Contact	EMM Consulting - St Leonards - Individual users,Mr.Andrew Crisp							
		GDA	56	357209	6371474	Open site	Valid	Artefact : -	Permits	100062,10223
37-6-3969	Hydro-IA35-15	Contact	AECOM Australia Pty Ltd - Sydney,Doctor.Andrew Peter McLaren							
		GDA	56	357209	6371474	Open site	Valid	Artefact : -	Permits	100062,10223

Lamond, Alison

From: Lamond, Alison
Sent: Friday, 27 November 2020 2:11 PM
Cc: Ian Smith; Terei, Mark; Colman, Tim; Ivanusic, Karl
Subject: Draft Methodology for the Kurri Kurri Gas Fired Power Station Aboriginal Cultural Heritage Assessment
Attachments: IS354500 Kurri Kurri Power Station Aboriginal heritage assessment methodology.pdf

Hello

Please find attached the Project Information and Draft Methodology for the Kurri Kurri Gas Fired Power Station Aboriginal Cultural Heritage Assessment for your review and comment.

Please note that comments on the draft Methodology close on the 4th of January 2021.

Please feel free to call me questions or concerns you may have.

I look forward to hearing from you.

Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist
+61 2 4979 2647 | + 61 417 980 800
alison.lamond@jacobs.com
Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302 | Australia

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Lamond, Alison

From: WIDESCOPE . <widescope.group@live.com>
Sent: Saturday, 28 November 2020 2:27 PM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Draft Methodology for the Kurri Kurri Gas Fired Power Station Aboriginal Cultural Heritage Assessment



Widescope Indigenous Group
ABN : 85 534 438 671
Contact : Steven Hickey
Address H/O: 73 Russell St, Emu Plains NSW 2750
E-mail : Widescope.group@live.com
Mobile : 0425 230 693

Hi,
I have reviewed the document and support the project Information and Methodology.
Thank you
Steven Hickey

From: Lamond, Alison <Alison.Lamond@jacobs.com>
Sent: Friday, 27 November 2020 2:11 PM
Cc: Ian Smith <ian.smith@snowyhydro.com.au>; Terei, Mark <Mark.Terei@jacobs.com>; Colman, Tim <Tim.Colman@jacobs.com>; Ivanusic, Karl <Karl.Ivanusic@jacobs.com>
Subject: Draft Methodology for the Kurri Kurri Gas Fired Power Station Aboriginal Cultural Heritage Assessment

Hello
Please find attached the Project Information and Draft Methodology for the Kurri Kurri Gas Fired Power Station Aboriginal Cultural Heritage Assessment for your review and comment.
Please note that comments on the draft Methodology close on the 4th of January 2021.
Please feel free to call me questions or concerns you may have.
I look forward to hearing from you.
Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist
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Lamond, Alison

From: Carolyn .H <cazadirect@live.com>
Sent: Sunday, 6 December 2020 4:54 PM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Draft Methodology for the Kurri Kurri Gas Fired Power Station
Aboriginal Cultural Heritage Assessment



INDIGENOUS SERVICES PTY LTD

Contact: Carolyn Hickey
M: 0411650057
E: Cazadirect@live.com
A: 10 Marie Pitt Place, Glenmore Park, NSW 2745
ACN: 639 868 876
ABN: 31 639 868 876

Hi,
I have reviewed the document and support the Methodology.
A1 would like to be involved in any future Meetings and field work.
Kind regards
Carolyn Hickey

From: Lamond, Alison <Alison.Lamond@jacobs.com>
Sent: Friday, 27 November 2020 2:11 PM
Cc: Ian Smith <ian.smith@snowyhydro.com.au>; Terei, Mark <Mark.Terei@jacobs.com>; Colman, Tim <Tim.Colman@jacobs.com>; Ivanusic, Karl <Karl.Ivanusic@jacobs.com>
Subject: Draft Methodology for the Kurri Kurri Gas Fired Power Station Aboriginal Cultural Heritage Assessment

Hello
Please find attached the Project Information and Draft Methodology for the Kurri Kurri Gas Fired Power Station
Aboriginal Cultural Heritage Assessment for your review and comment.
Please note that comments on the draft Methodology close on the 4th of January 2021.
Please feel free to call me questions or concerns you may have.
I look forward to hearing from you.
Regards

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alison.lamond@jacobs.com
Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302| Australia

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Lamond, Alison

From: jesse johnson <muragadi@yahoo.com.au>
Sent: Friday, 4 December 2020 2:40 PM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Draft Methodology for the Kurri Kurri Gas Fired Power Station
Aboriginal Cultural Heritage Assessment
Attachments: IS354500 Kurri Kurri Power Station Aboriginal heritage assessment
methodology.pdf

Hi Alison

I have read the project information and methodology for the above project, I agree with the recommendations made.

Kind regards

Jesse Johnson

0418970389

On Friday, 27 November 2020, 02:11:40 pm AEDT, Lamond, Alison <alison.lamond@jacobs.com> wrote:

Hello

Please find attached the Project Information and Draft Methodology for the Kurri Kurri Gas Fired Power Station
Aboriginal Cultural Heritage Assessment for your review and comment.

Please note that comments on the draft Methodology close on the 4th of January 2021.

Please feel free to call me questions or concerns you may have.

I look forward to hearing from you.

Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist

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alison.lamond@jacobs.com

Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302| Australia

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Lamond, Alison

From: Arthur Fletcher <wonn1sites@gmail.com>
Sent: Monday, 14 December 2020 6:09 AM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Draft Methodology for the Kurri Kurri Gas Fired Power Station Aboriginal Cultural Heritage Assessment

Ala Alison. We hope all is well with you guys. And yes we support both the Draft Methodology and our Full involvement with this project. Ps Stay safe all and an enjoyable break . Regards Arthur-Kauwul Elder and Auntie Lynne and Families.

Sent from my iPad

On 27 Nov 2020, at 2:11 pm, Lamond, Alison <Alison.Lamond@jacobs.com> wrote:

Hello

Please find attached the Project Information and Draft Methodology for the Kurri Kurri Gas Fired Power Station Aboriginal Cultural Heritage Assessment for your review and comment.

Please note that comments on the draft Methodology close on the 4th of January 2021.

Please feel free to call me questions or concerns you may have.

I look forward to hearing from you.

Regards

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alison.lamond@jacobs.com
Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302| Australia

<image001.jpg>

<image002.jpg>

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<image003.png>

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<IS354500 Kurri Kurri Power Station Aboriginal heritage assessment methodology.pdf>

Lamond, Alison

From: Deidre Perkins <dedemaree3@hotmail.com>
Sent: Friday, 27 November 2020 6:50 PM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Draft Methodology for the Kurri Kurri Gas Fired Power Station Aboriginal Cultural Heritage Assessment

Hi Ally,
So good to see you the other day,
I have no comments to make all good darlin
Deidre 😊🖤

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From: Lamond, Alison <Alison.Lamond@jacobs.com>
Sent: Friday, November 27, 2020 2:11:08 PM
Cc: Ian Smith <ian.smith@snowyhydro.com.au>; Terei, Mark <Mark.Terei@jacobs.com>; Colman, Tim <Tim.Colman@jacobs.com>; Ivanusic, Karl <Karl.Ivanusic@jacobs.com>
Subject: Draft Methodology for the Kurri Kurri Gas Fired Power Station Aboriginal Cultural Heritage Assessment

Hello
Please find attached the Project Information and Draft Methodology for the Kurri Kurri Gas Fired Power Station Aboriginal Cultural Heritage Assessment for your review and comment.
Please note that comments on the draft Methodology close on the 4th of January 2021.
Please feel free to call me questions or concerns you may have.
I look forward to hearing from you.
Regards

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Lamond, Alison

From: Darleen Johnson <murrabidgeemullangari@yahoo.com.au>
Sent: Monday, 30 November 2020 3:50 PM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Draft Methodology for the Kurri Kurri Gas Fired Power Station
Aboriginal Cultural Heritage Assessment
Attachments: IS354500 Kurri Kurri Power Station Aboriginal heritage assessment
methodology.pdf

Hi Alison

I have read the project information and draft Methodology for the above project, I endorse the recommendations made.

Kind regards
Ryan Johnson
0475565517

On Friday, 27 November 2020, 02:11:40 pm AEDT, Lamond, Alison <alison.lamond@jacobs.com> wrote:

Hello

Please find attached the Project Information and Draft Methodology for the Kurri Kurri Gas Fired Power Station Aboriginal Cultural Heritage Assessment for your review and comment.

Please note that comments on the draft Methodology close on the 4th of January 2021.

Please feel free to call me questions or concerns you may have.

I look forward to hearing from you.

Regards

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist

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alison.lamond@jacobs.com

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18 December 2020



Project Name: Kurri Kurri gas fired power station EIS
Project Number: IS354500

Subject: Aboriginal Cultural Heritage Site Survey Invitation

Dear 

Thank you for registering an interest in potential Aboriginal heritage at the site of a proposed gas fired power station development at Kurri Kurri, NSW. You would have originally been notified of the proposal by letters of invitation to potential Aboriginal stakeholders nominated by Heritage NSW (letters issued 12/11/20) or via an advertisement in the Koori Mail newspaper from 9/11/2020 – 20/11/20.

Snowy Hydro Limited (Snowy Hydro) (the proponent) is carrying out Aboriginal cultural heritage consultation in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW, 2010) and a draft methodology for the proposed Aboriginal Cultural Heritage Assessment was provided to Registered Aboriginal Parties for review on 27/11/2020. Feedback is required before 4/01/2021, as per the consultation requirements.

Also in accordance with the DECCW consultation requirements, Snowy Hydro now extends an invitation to all Registered Aboriginal Parties to attend a site survey. The aims of the site survey are to facilitate a process whereby Registered Aboriginal Parties can:

- Understand the natural landscape and local landform at the proposal site and the level of previous disturbance;
- Identify whether there are any Aboriginal objects of cultural value to Aboriginal people in the area of the proposed project; and
- Identify whether there are any places of cultural value to Aboriginal people in the area of the proposed project.

More detail about the purpose of the site survey is outlined in the draft Aboriginal Cultural Heritage Assessment (ACHA) methodology (Jacobs, 27/11/2020).

Key logistical details of the site survey are as follows:

- **Date and time:** Tuesday 12 January 2021 from 9.30 am to 12.30 pm.
- **Location:**

The proposal site is a former (decommissioned and now mostly demolished) aluminium smelter at Hart Road, Loxford, approximately 3 km north of the township of Kurri Kurri.

Please meet at the Hydro Aluminium Kurri Kurri Pty Ltd site office at corner of Hart Road and Dickson Road, Loxford (see map attached). There is off-street car parking adjacent to the offices.

From the east, take the Hart Road exit off the M15 Hunter Expressway and continue approximately 1 km north on Hart Road to reach the entrance of the former Hydro Aluminium smelter.

If coming from the west along the M15 Hunter Expressway, there is a large roundabout approximately 3 km east of Hart Road that allows traffic to turn around and head back east.

Due to the current situation there are specific Covid-19 requirements with which your representative will be required to comply. These include confirming being free of any Covid-19 symptoms (fever, cough, fatigue, sore throat or shortness of breath).

Note that this is not paid fieldwork. However, a payment of \$300 is offered to cover expenses. Cultural Heritage Solutions have been engaged to manage insurances and to facilitate expense payments, and they will be contacting you in this regard.

As per the ACHA methodology, the site survey is not the only opportunity for Registered Aboriginal parties to provide information about cultural significance of the proposal site. The draft ACHA methodology outlines a process whereby Registered Aboriginal Parties can:

- contribute to culturally appropriate information gathering and the research methodology;
- provide information that will enable the cultural significance of Aboriginal objects and/or places on the proposed project area to be determined;
- have input into the development of any cultural heritage management options.

This includes a 28 day review period for the draft cultural heritage assessment report.

Should you have any questions about the site survey please contact our heritage consultant, Alison Lamond of Jacobs on 4979 2647 or 0417 980 800 or email her on alison.lamond@jacobs.com

Alternatively, you can contact me should you have any queries.

Yours sincerely



Ian Smith
Project Manager
0409 840 165
ian.smith@snowyhydro.com.au





- 1. Proposed Switchyard Area
- 2. Proposed Plant Area
- 3. Proposed Buffer Area
- AHIMS sites
- Motorway
- Main roads
- Roads
- Railway
- Waterbodies
- Cadastre

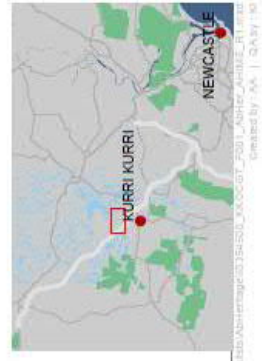
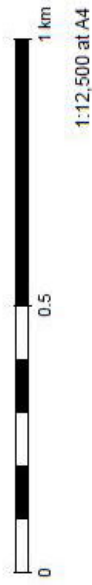


Figure 2.2 AHIMS search results

4 February 2021



Project Name: Kurri Kurri gas fired power station EIS
Project Number: IS354500

Subject: Aboriginal Cultural Heritage – notification of change to project area and further Site Survey Invitation

Dear 

Thank you for registering an interest in potential Aboriginal heritage at the site of a proposed gas fired power station development at Kurri Kurri, NSW. You would have originally been notified of the proposal by letters of invitation to potential Aboriginal stakeholders nominated by Heritage NSW (letters issued 12/11/20) or via an advertisement in the Koori Mail newspaper from 9/11/2020 – 20/11/20.

Snowy Hydro Limited (Snowy Hydro) (the proponent) is carrying out Aboriginal cultural heritage consultation in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW, 2010) and a draft methodology for the proposed Aboriginal Cultural Heritage Assessment (ACHA) was provided to Registered Aboriginal Parties for review on 27/11/2020 with feedback required before 4/01/2021.

Twelve groups attended a site survey held on 12/01/2021. Subsequently Snowy Hydro has decided to include a stormwater basin (see attached figure). This stormwater basin was previously proposed to be developed by the industrial estate developer, but will now form part of Snowy Hydro's project approval and therefore needs to be included in the Aboriginal Cultural Heritage Assessment report. As this area was not described in the draft ACHA methodology nor surveyed during the site survey in January, Snowy Hydro now extends an invitation to all Registered Aboriginal parties to attend a site survey of the proposed stormwater basin area only. The aims of the further site survey are to facilitate a process whereby registered Aboriginal parties can:

- Understand the natural landscape and local landform at the proposed stormwater basin location (we will not be surveying the proposal area surveyed in January) and the level of previous disturbance;
- Identify whether there are any Aboriginal objects of cultural value to Aboriginal people in the area of the proposed stormwater basin; and
- Identify whether there are any places of cultural value to Aboriginal people in the area of the proposed stormwater basin.

Key logistical details of the further site survey are as follows:

- Date and time: Thursday 11 February 2021 from 9.30 am to 11.00 am.
- Location: See map attached. The proposal site is a former (decommissioned and now mostly demolished) aluminium smelter at Hart Road, Loxford, approximately 3 km north of the township of Kurri Kurri.

Please meet at the Hydro Aluminium Kurri Kurri Pty Ltd site office at corner of Hart Road and Dickson Road, Loxford (see map attached). There is off-street car parking adjacent to the offices.

From the east, take the Hart Road exit off the M15 Hunter Expressway and continue approximately 1 km north on Hart Road to reach the entrance of the former Hydro Aluminium smelter. A project representative will greet you there.

If coming from the west along the M15 Hunter Expressway, there is a large roundabout approximately 3 km east of Hart Road that allows traffic to turn around and head back east.

Due to the current pandemic situation there are specific Covid-19 requirements with which your representative will be required to comply. These include confirming being free of any Covid-19 symptoms (fever, cough, fatigue, sore throat or shortness of breath).

Cultural Heritage Solutions have been engaged to manage insurances and payment. A fixed fee of \$250 for expenses and labour is offered.

As per the ACHA methodology, the site survey is not the only opportunity for Registered Aboriginal parties to provide information about cultural significance of the proposal site. The ACHA methodology outlines a process whereby registered Aboriginal parties can:

- contribute to culturally appropriate information gathering and the research methodology;
- provide information that will enable the cultural significance of Aboriginal objects and/or places on the proposed project area to be determined;
- have input into the development of any cultural heritage management options.

This includes a 28 day review period for the draft Aboriginal Cultural Heritage Assessment report.

Should you have any questions about the site survey please contact our heritage consultant, Alison Lamond of Jacobs on 4979 2647 or 0417 980 800 or email her on alison.lamond@jacobs.com

Alternatively, you can contact me should you have any queries.

Yours sincerely



Ian Smith
Project Manager
0409 840 165
ian.smith@snowyhydro.com.au



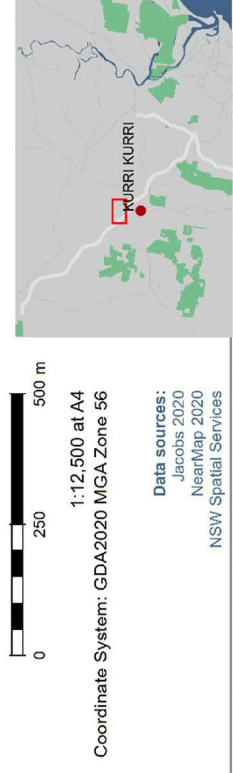


Figure 1 AHIMS Sites - Kurri Kurri Gas Fired Power Station

Lamond, Alison

From: Seifertova, Alexandra
Sent: Tuesday, 9 March 2021 6:36 AM
To: Lamond, Alison
Subject: Fwd: [EXTERNAL] Re: Kurri Kurri gas fired power station - Aboriginal Cultural Heritage Assessment Report Review
Attachments: IS354500_Kurri OCGT EIS_ACHAR Cover letter.pdf; IA354500-RPT-001_ACHAR_Draft 1.pdf; IA354500-RPT-001_AAR Draft 1.pdf

Fyi

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From: Darleen Johnson <murrabidgeemullangari@yahoo.com.au>
Sent: Tuesday, March 9, 2021 6:13:30 AM
To: Seifertova, Alexandra <Alexandra.Seifertova@jacobs.com>
Subject: [EXTERNAL] Re: Kurri Kurri gas fired power station - Aboriginal Cultural Heritage Assessment Report Review

Hi Alex
I have read the project information and recommendations, I endorse the recommendations made.
Kind regards
Ryan Johnson

On Monday, 15 February 2021, 07:27:03 pm AEDT, Seifertova, Alexandra <alexandra.seifertova@jacobs.com> wrote:

Dear Sir/ Madam,

Jacobs, on behalf of Snowy Hydro Limited (Snowy Hydro) (the proponent) are providing the draft Aboriginal Cultural Heritage Assessment Report and draft Archaeological Assessment Report to all Registered Aboriginal Parties (RAPs) and cultural knowledge holders for the proposed gas fired power station development at Kurri Kurri, NSW for review.

You are invited to read through the attached documents and provide feedback or comment on both reports. All comments on the draft documents need to be made by **Monday 15 March 2021** (a 28 day review period). Comments may be made to Alison Lamond by mail, by e-mail, and/ or by phone with contact details below.

Alison Lamond
alison.lamond@jacobs.com
H: 4979 2647
M: 0417 980 800

Please carefully review the attached document for further information and if you have any questions or queries don't hesitate to contact Alison, or alternatively myself.

Yours sincerely



Ian Smith
Approvals Manager
0409 840 165
ian.smith@snowyhydro.com.au

Lamond, Alison

From: Lamond, Alison
Sent: Friday, 12 March 2021 1:06 PM
To: Lamond, Alison
Subject: Kurri Kurri Smelter Draft ACHAR Comment closure

Hello

I am contacting you to remind you that the comment period for the Draft ACHAR for the Kurri Kurri Smelter project closes on Monday. If you wish to provide comment via phone or have any questions please don't hesitate to call me on 0417 980 800

Thanks

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist
0417 980 800
alison.lamond@jacobs.com
Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302 | Australia

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Reinventing tomorrow.

■ I acknowledge the Traditional Owners of Country upon which I work, and pay my respects to them, their culture and their Elders past, present and future. ■

Lamond, Alison

From: cacatua4service@tpg.com.au
Sent: Saturday, 13 March 2021 2:13 PM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Kurri Kurri Smelter Draft ACHAR Comment closure

Alison,,

Sorry for the delay.

However AGA Services and Cacatua General Services have tabled all the information that was supplied with regards to Kurri Kurri Smelter.

Both Cacatua and AGA support all the information that was issued.

thank you
Donna

----- Original Message -----

From:
"Lamond Alison" <Alison.Lamond@jacobs.com>

To:
"Lamond Alison" <Alison.Lamond@jacobs.com>
Cc:

Sent:
Fri, 12 Mar 2021 02:06:03 +0000
Subject:
Kurri Kurri Smelter Draft ACHAR Comment closure

Hello

I am contacting you to remind you that the comment period for the Draft ACHAR for the Kurri Kurri Smelter project closes on Monday. If you wish to provide comment via phone or have any questions please don't hesitate to call me on 0417 980 800

Thanks

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist

0417 980 800

alison.lamond@jacobs.com

Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302| Australia

I acknowledge the Traditional Owners of Country upon which I work, and pay my respects to them, their culture and their Elders past, present and future.

Lamond, Alison

From: Kerrie Brauer [REDACTED]
Sent: Friday, 12 March 2021 3:36 PM
To: Lamond, Alison
Subject: [EXTERNAL] RE: Kurri Kurri Smelter Draft ACHAR Comment closure
Attachments: Awabakal Boundary etc p1.jpg; Awabakal Boundary etc p2.jpg; Statement of Significance for the Awabakak and Guringai Peoples 2013.doc

Hi Alison,

It was great talking with you today, and I have attached the reference regarding the Awabakal Boundary from the Newcastle Uni site which might be of interest, and the Statement of Significance as discussed.

If you require any further information please do not hesitate in contacting me.

Cheers Kerrie



Kerrie Brauer | Director | Administration | Awabakal Traditional Owners Aboriginal Corporation

[REDACTED]

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From: Lamond, Alison [mailto:Alison.Lamond@jacobs.com]
Sent: Friday, 12 March 2021 1:06 PM
To: Lamond, Alison
Subject: Kurri Kurri Smelter Draft ACHAR Comment closure

Hello

I am contacting you to remind you that the comment period for the Draft ACHAR for the Kurri Kurri Smelter project closes on Monday. If you wish to provide comment via phone or have any questions please don't hesitate to call me on 0417 980 800

Thanks

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist

0417 980 800

alison.lamond@jacobs.com

Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302 | Australia



Challenging today.
Reinventing tomorrow.

■ I acknowledge the Traditional Owners of Country upon which I work, and pay my respects to them, their culture and their Elders past, present and future. ■

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Lamond, Alison

From: Arthur Fletcher <wonn1sites@gmail.com>
Sent: Friday, 12 March 2021 4:12 PM
To: Lamond, Alison
Subject: [EXTERNAL] Re: Kurri Kurri Smelter Draft ACHAR Comment closure

Ala Alison.

We hope all is well with you guys. Yes we support this ACHAR at this point in time. Ps All stay safe. Regards Arthur -
Kauwul and Lynne.
Sent from my iPad

On 12 Mar 2021, at 1:06 pm, Lamond, Alison <Alison.Lamond@jacobs.com> wrote:

Hello

I am contacting you to remind you that the comment period for the Draft ACHAR for the Kurri Kurri Smelter project closes on Monday. If you wish to provide comment via phone or have any questions please don't hesitate to call me on 0417 980 800
Thanks

Alison Lamond | BA. (Hons), BSci. | [Jacobs](#) | Senior Archaeologist
0417 980 800
alison.lamond@jacobs.com
Level 4, 12 Stewart Avenue | Newcastle West, NSW, 2302| Australia

<image001.jpg>

<image002.jpg>

I acknowledge the Traditional Owners of Country upon which I work, and pay my respects to them, their culture and their Elders past, present and future.

<image003.png>

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Appendix B. Archaeological Assessment Report



Hunter Power Project
Archaeological Assessment Report

Rev 0
13 April 2021



Hunter Power Project

Project No: IS354500
Document Title: Archaeological Assessment Report
Revision: Rev 0
Date: 13 April 2021
Client Name: Snowy Hydro Limited
Project Manager: K Ivanusic
Author: A Lamond
File Name: IS354500_Hunter Power Project_EIS_AAR_final_20210416

Jacobs Group (Australia) Pty Limited
ABN 37 001 024 095
Level 4, 12 Stewart Avenue
Newcastle West, NSW 2302
PO Box 2147
Dangar, NSW 2309
Australia
T +61 2 4979 2600
F +61 2 4979 2666
www.jacobs.com

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Document history and status

Revision	Date	Description	Author	Checked	Reviewed	Approved
Rev 0	13/04/2021	Issue for EIS	A Lamond	F Scully	T Colman, M Luger	K Ivanusic

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Executive Summary

Snowy Hydro Limited (Snowy Hydro) proposes to develop a gas fired power station near Kurri Kurri, NSW ('the Proposal'). Snowy Hydro is seeking approval for the Proposal from the NSW Minister for Planning and Public Spaces under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

Snowy Hydro is seeking approval for the Proposal as Critical State Significant Infrastructure (CSSI). Under the *State Environmental Planning Policy (State and Regional Development) 2011* (SEPP SRD) the Proposal is subject to Part 5, Division 5.2 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) which requires the preparation of an environmental impact statement (EIS) in accordance with Secretary's Environmental Assessment Requirements (SEARs).

The Proposal Site is located in the small suburb of Loxford in the Hunter Valley region of New South Wales, approximately three kilometres (km) north of the town of Kurri Kurri, approximately 30 km west of Newcastle CBD and 125 km north of Sydney. The Proposal Site is located within the Cessnock City Council LGA (Figure 1.1).

Previous archaeological investigations within the Central Lowlands of the Hunter Valley, and the Proposal Site in particular, have developed an understanding of traditional Aboriginal occupation within the area as well as processes of archaeological site formation. These previous assessments demonstrate that the area has been subject to past disturbance, particularly during the post-contact period, which has impacted the Aboriginal heritage of the area and probably reduced the overall number of archaeological sites.

A search of the Aboriginal Heritage Information Management System (AHIMS) was undertaken on 22 October 2020 covering the footprint of the Proposal Site and a 2.5 km buffer zone. Seventy-eight previously recorded sites are present near the Proposal Site (no sites were identified within the Proposal Site). All sites are artefact scatters on open ground, four of which include an area of potential archaeological deposit.

Archaeological surveys were carried out on the 12 January 2021 and 11 February 2021. On-site consultation with nominated site officers from the Registered Aboriginal Parties (RAPs) enabled the development of management and mitigation recommendations. No new sites were identified within the Proposal Site, however the potential for archaeological deposits at depth within the alluvium was identified.

Significance, potential impacts and management recommendations will be detailed in the Kurri Kurri Gas Fired Power Station Aboriginal Cultural Heritage Assessment Report (ACHAR) (Jacobs 2021).

1. Introduction

1.1 Proposal background

Snowy Hydro Limited (Snowy Hydro) proposes to develop a gas fired power station near Kurri Kurri, NSW ('the Proposal'). Snowy Hydro is seeking approval for the Proposal from the NSW Minister for Planning and Public Spaces under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

Snowy Hydro is seeking approval for the Proposal as Critical State significant Infrastructure (CSSI). Under the *State Environmental Planning Policy (State and Regional Development) 2011* (SEPP SRD) the Proposal is subject to Part 5, Division 5.2 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) which requires the preparation of an environmental impact statement (EIS) in accordance with Secretary's Environmental Assessment Requirements (SEARs).

This Archaeological Assessment Report (AAR) has been prepared as a part of the Aboriginal cultural heritage assessment report (ACHAR) in support of the EIS for the Proposal.

1.2 Proposal Location

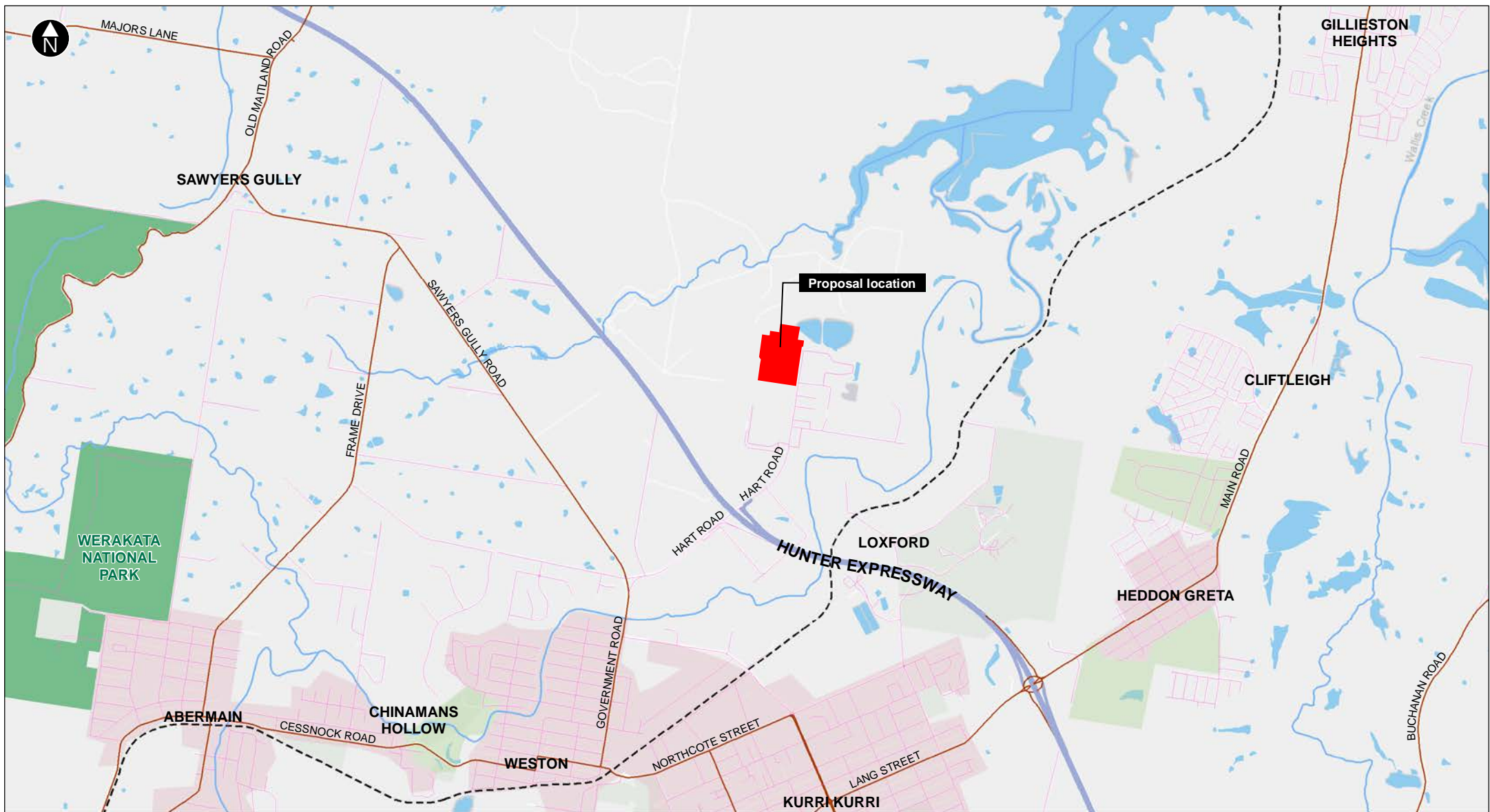
The Proposal Site is located in the small suburb of Loxford in the Hunter Valley region of New South Wales, approximately three km north of the town of Kurri Kurri, approximately 30 km west of Newcastle CBD and 125 km north of Sydney. The Proposal Site is located within the Cessnock City Council LGA (Figure 1.1).

The Proposal Site forms part of the former Kurri Kurri aluminium smelter site, which is owned by Hydro Aluminium Kurri Kurri Pty Ltd (Hydro Aluminium), which operated from 1969 to 2012 and was closed in 2014. Since closure of the Kurri Kurri aluminium smelter, extensive remediation works have taken place at the site, including Stage 1 of a two-stage demolition program of existing structures, asbestos removal and recycling of waste materials.

The main elements of the Proposal are as follows:

- Two large industrial frame gas turbines (constructed on concrete foundations (each requiring bulk excavation of an area approximately 12 m by 60 m to a depth of 2 m) anchored by pilings to approximate depth of 17 m (subject to detailed design))
- A connecting electrical switchyard (constructed on concrete foundations)
- Storage tanks and other water management infrastructure
- Fire water storage and firefighting equipment such as hydrants and pumps
- Maintenance laydown areas
- Diesel fuel storage tank(s) and truck unloading facilities
- Site access roads and car parking
- Office/administration, amenities, workshop/storage areas
- Sediment retention and stormwater basin (requiring excavation of an area approximately 40 m by 70 m to a maximum depth of about 4 m).

A detailed description of the Proposal and each component is provided in Chapter 2 of the EIS.



- | | | |
|---|---|--|
| Proposal location | Urban areas | Motorway |
| National Parks and Wildlife Services estate / reserve | Waterbodies | Main roads |
| Recreation areas | | Roads |
| | | Railway |

0 1 2 km

1:40,000 at A4
Coordinate System: GDA2020 MGA Zone 56

Data sources:
Jacobs
NSW Spatial Services

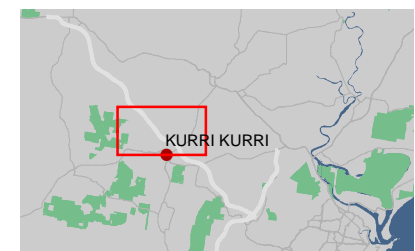


Figure 1-1 Proposal location (regional)

1.3 Investigators and contributions

This report was authored by Alison Lamond (Senior Archaeologist, Jacobs). Fran Scully (Principal Archaeologist, Jacobs) undertook the technical review.

Alison holds a Bachelor of Arts (Honours) in Australian Prehistoric and Historical Archaeology and a Bachelor of Science in Geology and Geophysics from the University of Sydney and has over 10 years experience as an archaeologist and cultural heritage advisor.

Fran Scully (Principal Archaeologist, Jacobs). Fran holds an MSc in archaeological geophysics from the University of Bradford and has over 28 years experience as an archaeologist and cultural heritage advisor.

2. Environmental context

2.1 Geomorphology and hydrology

The Proposal Site is located within the Central Lowlands, a broad belt of lowlands about 15 kilometres wide, at the centre of the Bioregion. It is bounded on all sides by steep rugged country, except in the far west where the Cassilis Gate provides access to the interior. To the south is dissected plateau country, and to the north and west are the Liverpool Range and Barrington Uplands respectively. Although historically the land use in the area has been primarily rural, open cut mining has developed throughout the region on a large scale, especially around Singleton and Muswellbrook.

Land to the east and north of the Proposal Site comprises low-lying and largely flat, open rural land. It includes the waterways of Swamp Creek, Black Waterholes Creek and the Swamp Creek wetlands, which drain to the Wentworth swamps and are part of the Hunter River floodplain. Land outside the Proposal Site gradually slopes (and drains) to the north-east, towards Black Waterholes Creek.

Streams in the area drain north into the Hunter River from elevated landforms to the south (Brayshaw 1994). Seasonal stresses during spring-summer may affect plant growth, however adequate soil moisture is available throughout most of the year (Matthei 1995). The proximity of permanent water, ephemeral streams, and wetland to the Proposal Site and wider region, would have meant that the area is likely to have been suitable for Aboriginal occupation.

2.2 Geology and soil landscape

The Proposal Site lies within a region which extends across a range of landforms and geological features. It is located in the north east of the Sydney Basin Bioregion, which consists of a geological basin filled with near horizontal sandstones and shales of Permian to Triassic age that overlie older basement rocks of the Lachlan Fold Belt. The sedimentary rocks have been subject to uplift with gentle folding and minor faulting during the formation of the Great Dividing Range. Erosion by coastal streams has also created a landscape of deep cliffed gorges and remnant plateaus.

The Neath soil landscape has been identified in the Proposal Site (Matthei 1995). The Neath soil landscapes is comprised of Grey Solodic Soils in the poorly drained areas associated with exposed coal seams, and Yellow Solodic Soils on the better drained lower slopes. The landform associated with this soil landscape is undulating low rises and swamps with elevations of 40 – 80 m. Local relief is under 30 m. Slopes are up to three percent, with slope lengths up to 2,000 m. Drainage lines are common at 500 – 800 metre intervals.

2.3 Vegetation

Within the Hunter Valley, Albrecht (2000) has estimated that 99 per cent of the vegetation on the valley floor of the major valleys has been removed due to European land use practices. Typical vegetation of the region includes Melaleuca and Leptospermum species (tea-trees and paperbarks). Also grey gum, scribbly gum, red stringybark, narrow-leaved red ironbark and tussock grass (eSPADE 2021).

The nearby Wentworth Swamp supports a freshwater wetland vegetation community, containing specified such as Forest Redgum (*Eucalyptus tereticornis*), Swamp Oak (*Casuarina glauca*), Snow-in-Summer (*Meleleuca linearifolia*) and Cabbage Gum (*Eucalyptus amplifolia*). A large majority of the Proposal Site has been cleared for the development of the former Kurri Kurri aluminium smelter and as a result has only sparse vegetation (within footprint) including natives, grass and weeds.

Though the current vegetation communities are not characteristic of the original vegetation, it can be deduced that the original vegetation would have supplied and supported Aboriginal groups camping in the area and passing through. The close presence of Wentworth Swamp would have supported a large and diverse range of plant and animal species which could have been regularly exploited.

2.4 Former land use and disturbance

Following the first non-Aboriginal settlers into the region, large portions of land to the north of the Proposal Site were reserved as Village Reserve (V.R.) and Travelling Stock Route (T.S.R. 37). Land which was cultivated was predominantly used for beef cattle rearing/grazing.

The greater Kurri Kurri area remained predominantly rural until the discovery of coal in commercial quantities and the subsequent development of the South Maitland Coalfields. Greta Coal and Shale Mine Company were the first commercial coal operation in the area, forming in 1864 (Parkes et al. 1979: 217).

Following the decline in the coal mining industry in the 1950s and 1960s, the Proposal Site was commissioned for the Hydro Aluminium Kurri Kurri Pty Ltd aluminium smelter in 1969. The capacity of the smelter was less than 25,000 tonnes of aluminium per annum. Two expansion projects brought the annual tonnage to 150,000 tonnes by 1985. The smelter ceased operation in late 2012 and was permanently closed in 2014. The construction and operation of the smelter resulted in significant disturbances to the Proposal Site.

The Proposal Site has seen extensive native vegetation clearance, pastoral activities such as livestock grazing, and the construction and expansion of the Kurri Kurri aluminium smelter.

2.5 Summary

In summary, the Proposal Site is located in an area that would have provided sufficient resources for Aboriginal people to exploit. This would have been an attractive area for people to use and occupy, due to the availability of permanent potable water, ephemeral streams and proximity to the Wentworth Swamp. Evidence of this utilisation would be expected to be identified in the Proposal Site, however, land use activities in this area since European occupation are likely to have affected this.

The Proposal Site has been heavily disturbed by past development including the former Kurri Kurri aluminium smelter, and subsequently by the demolition and remediation works currently under way. It is therefore considered unlikely that Aboriginal archaeological material would exist at the Proposal Site, other than in deep alluvium that has not been previously disturbed, or in the location of the proposed switchyard (northern extent of the Proposal Site, which has been disturbed, but to a lesser extent). Therefore, while the Proposal Site lies in proximity to nearby areas that have revealed evidence of past Aboriginal use or occupation, it is less likely to contain any such evidence that might be uncovered in construction of the Proposal.

3. Previous archaeological investigations

Previous archaeological investigations within the Central Lowlands of the Hunter Valley and the Proposal Site in particular, have allowed for an understanding of traditional Aboriginal occupation within the area as well as the process of archaeological deposition and preservation. These previous assessments demonstrate that the area has been subject to past land uses, particularly during the post-contact period, which have impacted the preservation of Aboriginal objects. Their findings are as follows:

Table 3.1: Previous relevant archaeological investigations in and near the Proposal Site

Reference	Locality	Comments	Relevant results
Djekic (1984)	Kurri Kurri to Alcan	Aboriginal Heritage Assessment (field survey only)	Landforms adjacent to “swamps and watercourses” were identified as areas of high archaeological potential. Five (5) Aboriginal sites were recorded: four (4) open camp sites, and one (1) isolated find.
Dean-Jones (1989)	East Maitland	Aboriginal Heritage Assessment (field survey only)	A total of six (6) Aboriginal sites were identified: two (3) open camp sites, two (2) isolated finds and two (2) areas of PAD.
Brayshaw (1994)	National Highway Link F3 to Branxton	Aboriginal Heritage Assessment (field survey only)	A total of five (5) open camp sites, five (5) isolated finds and ten areas of Potential Archaeological Deposit (PAD) were identified.
Mills (1999)	Kurri Kurri	Aboriginal Heritage Assessment (field survey only)	A total of two (2) isolated finds and one area of PAD were identified.
Umwelt Australia Pty Limited (2002)	John Renshaw Drive	Aboriginal Heritage Assessment (field survey only)	The area surveyed was comprised of approximately 51 hectares and extended 12.8 kilometres along and 20m either side of the existing road (John Renshaw Drive) the eastern section of the surveyed area began at the Cessnock LGA boundary and extended west to Stanford Merthyr. Four (4) Aboriginal sites were identified: three (3) open camp sites and one (1) isolated find.
Insite Heritage Pty Ltd (2005)	Limestone Creek	Archaeology Test Excavation Results and Management Plan	In 2004 Insite Heritage undertook test excavation of sandy deposits identified as PAD in three locations on the north side of Limestone Creek. Although no plans of the excavation are available for review, the investigation area was located on the lower reaches of Limestone Creek near the confluence with Bellbird Creek. A total of 20 square metres were excavated.
Stedinger Associates (2005)	Lot 101, Mt View Road, Cessnock	Salvage Excavation	Open area excavation of Mount View 8 site. 3777 artefact fragments recovered from 365 squares within 650m ² . Minimum number artefacts calculated as 2686. Distribution and nature of assemblage indicates artefact manufacture occurring on site. Large number of non-artefactual fragments found (40% of artefact weight), may represent concentrations of heat shattered artefacts.

Reference	Locality	Comments	Relevant results
Archaeological and Heritage Services Pty Ltd (AHMS) (2014)	Cessnock LGA	Aboriginal Heritage Study	The aim of the study was to provide Cessnock City Council with greater spatial information and certainty of the Aboriginal heritage resource within the LGA. While extensive analysis was undertaken of the pre-contact archaeological record, a focus of the study was on any contact and post-contact Aboriginal sites or places within the LGA.
AECOM (2014)	Hydro Aluminium Smelter Site and Associated Buffer Land	Aboriginal Cultural Heritage Assessment	The survey of the aluminium smelter site identified 65 new Aboriginal Archaeological surface sites and 20 previously recorded sites. Landforms associated with Black Waterholes Creek, Swamp Creek and Wentworth Swamp were identified as highly sensitive, with increased archaeological potential. The management recommendations of the project area to conserve these sites whenever possible.
EMM Consulting (2014)	Kurri Kurri	Aboriginal Cultural Heritage Assessment (field survey only)	One (1) isolated find (unidirectional core) was identified in an area of high disturbance.
Jacobs (2019)	Testers Hollow	Aboriginal Cultural Heritage Assessment (including Test excavation)	Archaeological test excavation identified subsurface on both sides for the waterway. While the deposits on the southern side were disturbed by road and dam construction activities, testing on the north side identified a high-density subsurface deposit.

The review of existing archaeological assessments within the vicinity of the Proposal Site confirms that the Wentworth Swamp precinct contains varying amounts of Aboriginal archaeological material (noting that no sites have been previously recorded within the Proposal Site). This material was mostly concentrated where access to larger bodies of reliable water and sufficient food resources was available. This enabled relatively large groups of people to occupy these areas for relatively long periods of time. The overall landscape has high archaeological sensitivity and cultural significance (Reeves 2006: 12).

3.1 Previous archaeological assessments in the local area

The following studies offer more insight into the archaeological context of the Proposal Site as the Hunter Expressway is located in proximity to the south of the Proposal Site and Testers Hollow is located to east and is also associated with the Wentworth Swamp.

3.1.1 Hunter Expressway Umwelt (2018a) and Umwelt (2018b)

The Aboriginal cultural heritage and archaeological assessments and salvage for the Hunter Expressway (a four-lane dual carriageway) were undertaken by Umwelt (2018a). Nine different catchments were crossed by the Hunter Expressway corridor, including the two creek catchments; Swamp Creek and Black Waterholes Creek, adjacent to which the Proposal Site is located, and Wallis Creek which these creeks join with to form the Wentworth Swamps.

During the Hunter Expressway assessment, 174 sites were recorded, 70 sites were conserved, 100 were salvaged, and four were partially salvaged and partially conserved (Umwelt 2018a: vii).

Throughout all the catchment areas artefact types included flakes, broken flakes, retouched flakes, flaked pieces, cores, broken cores, grindstones, grindstone fragments, hammerstones, anvils, a pounder, heat shatter, an axe, axe blanks, and a manuport. Raw material varied from silcrete, tuff, chert, petrified wood, basalt, volcanic,

hornfels, quartz, quartzite, chalcedony, sandstone, silicified sandstone, fine grained siliceous and ignimbrite, and then post contact material including porcellanite, agate and glass.

Within the 3.86 km that was investigated, over 4065 artefacts were recovered from surface and subsurface collection. The Hunter Expressway corridor is viewed as being a place of movement, which is evidenced from artefacts showing an eastern movement into the centre of the floodplain (Umwelt 2018a: 75). Raw material includes silcrete, tuff, chert, hornfels, quartz, quartzite and chalcedony. One third of the tuff that was present was recognizable as Nobbys Tuff and another one third of tuff was recognised as occurring on the western side of Hexham Swamp (Umwelt, 2018a: 75). In relation to this, there is evidence of a rotation of the cores and dorsal scars. This indicates that cores have not been exhausted and that there was not a return to local raw material sources.

Artefacts that were recorded included flakes, broken flakes, retouched flakes, flaked pieces, cores and heat shatter. With broken flakes being dominant and retouched and backed artefacts present in small numbers. Artefact scatters and isolated finds were often in close association with creeks and were all located near reliable food and water sources. Moderate to large site sized artefact assemblages were commonly found on spur crests and adjacent low gradient slopes down to the floodplain (Umwelt 2018a: 75).

Materials such as silcrete, mudstone, chert, petrified wood, volcanic, hornfels, quartz, quartzite, chalcedony, basalt, silicified sandstone, and siltstone occur in the Hunter River which is 12 km north from the catchment. The tuff material can be divided into three different sources, with one third coming locally from the Hunter River. The remaining two thirds occur from Nobbys Headland, which is over 28.5 km south-east from the catchment, and the western side of Hexham Wetlands which is approximately 9.5 km east-south-east.

3.1.2 Testers Hollow: Kayandel (KAS) 2018 and Jacobs (2019 and 2021 in prep)

Kayandel Archaeological Services (KAS) was commissioned by Jacobs on behalf of NSW Roads and Maritime, to prepare an Aboriginal Archaeological Survey Report (AASR) on the proposal to upgrade Cessnock Road at Testers Hollow. The purpose of that report was to present the findings of an Aboriginal archaeological survey and assessment of the study area in accordance with Stage 2 of the Roads and Maritime *Procedure for Aboriginal Cultural Heritage Consultation and Investigation* (PACHCI) guidelines (Roads and Maritime, 2011). The report assessed the likely presence of Aboriginal cultural heritage items in the study area and advised on management strategies towards the better identification and mitigation of potential damage to Aboriginal objects by the proposed upgrade.

Two previously unrecorded Aboriginal sites were identified. These sites were assigned as TH-AS-001 and TH-PAD-001. TH-AS-001 being a surface artefact scatter comprising of 18 stone artefacts and an area of PAD on the alluvial plain south of Testers Hollow. The presence of Aboriginal objects on the surface is indicative that artefact-bearing deposit may be present within the land south of Testers Hollow. TH-PAD-001 was an area of PAD that was identified to extend along the mid and upper slope on the northern side of Testers Hollow.

Jacobs (2019) undertook the archaeological test excavation of the two sites. Excavation at TH-AS-001 on the south side showed a high level of disturbance from previous earthmoving activities and a substantial amount of fill. The small number of artefacts identified were not in situ.

Excavations on the northern side within TH-PAD-001 showed that the area had been subject to a low level of previous disturbance and high concentrations of artefacts were identified within the midslope portion of the site. The presence of this site reinforces the pattern of sites on elevated landforms in proximity to water suggested in the project's predictive model.

In 2020, Jacobs undertook a program of salvage excavations at Testers Hollow. The salvage excavation area was focused on a central area of TH-PAD-001 (AHIMS #38-4-1997). The assemblage obtained from the salvage program comprised 3662 artefacts of raw materials common to the area and that can be sourced in the wider landscape. The most common are Indurated mudstone/Tuff/Chert (IMTC) and silcrete. Based on the lithic and residue analysis the site appears to have been at least in part used as a butchering and food processing area where tools were manufactured and on occasion hafted and used as knives to cut and slice skin and to remove meat from bone by cutting and sawing.

3.2 Summary

The review of existing archaeological assessments in the vicinity of the Proposal Site confirms that the Wentworth Swamp precinct contains varying amounts of Aboriginal archaeological material. The Aboriginal archaeological material is mostly concentrated where access to larger bodies of reliable water and sufficient food resources were available. This enabled the gathering of relatively large groups of people that could occupy these areas for relatively long periods of time. The overall landscape has high archaeological sensitivity and cultural significance (Reeves 2006: 12).

Raw materials for stone tool manufacture come from both the coast and inland sources, indicating that Awabakal people had access to these areas or at the very least traded raw materials such as Nobby's tuff as did the Wonnarua who accessed the cobble beds of the Hunter River. Both raw material types are found in the catchment area, yet the size of core reduction and residual cortex indicates that they were unable to replenish their supplies locally. A variety of stone tool types are found in the area from backed blades to grinding stones and pounders indicating that a full range of activities occurred here.

Information compiled in this background review provides the framework for the development of a predictive model for site location, which is discussed further in Section 4.3.

4. Desktop review of the Proposal Site

The aim of the archaeological desktop review is to:

- Identify any known Aboriginal heritage sites or Aboriginal cultural places with potential to be impacted by the Proposal
- Identify areas within the Proposal Site where there are likely to be previously unknown Aboriginal heritage sites with potential to be impacted by the Proposal.

The desktop assessment was designed to fulfil the requirements 1-4 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010c).

4.1 Methodology

The preparation of current heritage and spatial data relating to the Proposal Site included:

- A search and review of the Aboriginal Heritage Information Management System (AHIMS)
- Heritage data from previous archaeological assessments, including areas of potential archaeological deposit (PAD) and potential archaeological sensitivity (PAS), Aboriginal heritage sites and Aboriginal cultural places
- Heritage data from previous archaeological assessments
- Aerial imagery.

4.2 Database searches

Alison Lamond (Senior archaeologist, Jacobs) carried out a search of the Aboriginal Heritage Information Management System (AHIMS) on 22 October 2020. The Proposal Site and a 2.5 km buffer zone was used as the search area. The buffer zone would not be impacted by the Proposal; rather, it is included to provide information on the archaeological context of the search area.

There are 78 previously recorded sites identified in the AHIMS search, five of which were recorded as being in close proximity to the Proposal Site (within 300 metres) (refer to Table 4.1 and Table 4.2). The complete list of AHIMS site records is provided in Appendix A.

Table 4.1: AHIMS Search Results

Site Type	Description	Number of Sites
Isolated Find	A single stone artefact	20
Artefact Scatter	Multiple stone artefacts	54
PAD	Potential subsurface archaeological deposit	2
Artefact Scatter with PAD	Multiple stone artefacts visible on the surface with a potential subsurface archaeological deposit	2

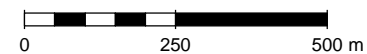
Table 4.2: AHIMS Sites within 300m of the Proposal Site

AHIMS site ID	Site Name	Site Validity	Site Type	Approx. distance from the Proposal Site
37-6-3969	Hydro-IA35-15	Valid	Artefact Scatter	250 m
37-6-3872	Hydro PAD 1	Valid	PAD	50 m
37-6-3065	Hydro-AS22-14	Valid	Artefact Scatter	150 m
37-6-3068	Hydro-AS26-14	Valid	Artefact Scatter	170 m
45-3-3387	KK04	Valid	Artefact Scatter with PAD	250 m



- | | | |
|--|---|--|
| Proposal site | — Motorway | Waterbodies |
| ★ AHIMS sites | — Main roads | Cadastre |
| | — Roads | Stormwater basin |
| | ---- Railway | |

- ① Proposed Switchyard Area
- ② Proposed Plant Area
- ③ Proposed Buffer Area



1:12,500 at A4
Coordinate System: GDA2020 MGA Zone 56

Data sources:
Jacobs 2020
NearMap 2020
NSW Spatial Services

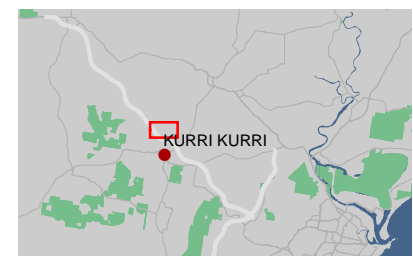


Figure 4-1 AHIMS Sites

4.3 Predictive model

Predictive modelling is used to determine the archaeological sensitivity of particular landforms within the Proposal Site. The predictive model used to identify areas of archaeological sensitivity for this desktop assessment is based on a 'land system' or 'archaeological landscape' model of site location. This type of modelling enables the prediction of Aboriginal archaeological site locations based on known patterns of Aboriginal archaeological site distribution in similar landscape regions or archaeological landscapes.

The predictive model was developed based on:

- A review of previous models developed for the area
- An assessment of the results of the previous archaeological assessments reviewed in Section 2 above
- The interpretation of the distribution patterns of known Aboriginal Archaeological sites in and around the Proposal Site
- A study of previous impacts to the Proposal Site and the potential effects of these impacts on the archaeological record.

The following predictive points are noted for the landscapes traversed by or surrounding the Proposal:

- Elevated landforms adjacent to ephemeral waterways possess high archaeological potential
- The most common Aboriginal site types will be surface and sub-surface scatters of stone artefacts
- The most commonly occurring raw material will be indurated mudstone followed by silcrete
- Within the former aluminium smelter footprint surface and sub-surface deposits are likely to be heavily disturbed and may contain areas of imported fill
- Sub-surface archaeological deposit is most likely to be within 200 metres of a water source (river or creek)
- Ridgelines and hills will have lower density of subsurface and surface artefacts but may be of higher cultural significance to the Wonnarua people.

However, the levels of previous disturbance across the Proposal Site means that the following predictive points are specific to the Proposal Site:

- Within the former aluminium smelter footprint surface and sub-surface deposits are likely to be heavily disturbed and may contain areas of imported fill
- Sub-surface archaeological deposit is most likely to be within 200 metres of a water source (river or creek).

4.3.1 Expected site types within the Proposal Site

The predictive model indicates that certain site types are more likely to be prevalent in the landscape. The degree of preservation and intactness will vary dependent on historical and current land use and the nature of the site.

- Open camp sites (artefact scatters): are the most likely sites to have survived in the archaeological record. They are scatters of stone artefacts with little associated food residue such as shell and bone. Since larger camp sites would have been associated with permanent water sources, the most likely places for these camp sites will be on terraces or low, flat spurs adjacent to and above swamps or permanent creeks. The majority of artefact scatters found within the Upper Hunter contain less than five artefacts occurring at low density and are located close to drainage lines (AECOM 2012). The majority of stone artefacts identified in the vicinity of the Proposal Site are manufactured from silcrete or silicified volcanic tuff, which are both locally available materials (Dyall 1981). No (potential) open camp sites or artefact scatters have been recorded at the Proposal Site.

- Scarred and carved trees: Scarred trees are identified by the purposeful removal of bark for use in the manufacture of artefacts such as containers, shields and canoes. The bark was also used for the construction of shelters. Carved trees also exhibit evidence of purposeful removal of bark (and wood), but differ from scarred trees in that geometric patterns and figures are cut into the tree. Although scarred/carved tree sites have been noted in the region, clearance of old growth timber has resulted in a low potential for this site type to be present. No evidence of scarred or carved trees exists within the Proposal Site.
- Grinding grooves: Within the Hunter, sandstone exposures in watercourses were often used for shaping or sharpening ground stone axes (Kuskie 1997). This activity would often result in clearly observable grooves in the sandstone. Due to the lack of sandstone exposure this site type is unlikely to be present at the Proposal Site.
- Bora/Ceremonial sites: These sites are usually identified as mounded earth rings which were used for ceremonial activities. The nature of these sites makes them particularly susceptible to impact. These sites are often known only from the oral traditions of local Aboriginal groups. As a result of the extensive previous disturbance of the Proposal Site the survival of any physical evidence of these sites if present is unlikely.
- Natural/mythological/ritual sites: These sites may not exhibit any physical or archaeological evidence, and their identification is derived from local Aboriginal tradition and oral history. These sites often have mythological associations and are associated with ceremonial activity in the past. These sites are sometimes prominent landmarks, such as mountains, rocky outcrops or headlands. Where such landmarks occur outside the study area, they may still be relevant as cultural markers from perspectives within the Proposal Site.
- Burial sites: Burials are most commonly found in soft sandy, alluvial deposits. This tends to be the case because such conditions facilitate interment (i.e. the soil is lighter and more easily dug). There are no known burials located within the Proposal Site.

5. Archaeological Survey

5.1 Aims

The aim of the archaeological survey was to completely assess areas of the Proposal Site where impacts are proposed and identify any archaeological objects, or areas with the potential to contain archaeological objects (PADs). On-site consultation with nominated site officers from the RAPS contributed to the development of management and mitigation recommendations, including recommendations for any further assessment (such as test excavation).

5.2 Timing and personnel

Archaeological surveys were carried out on the 12 January 2021 and 11 February 2021. The nominated site officers who participated in the surveys are listed in Table 5.1.

Table 5.1: Archaeological survey personnel

Date	Fieldwork Representative	Organisation
12 January 2021	Serina Forscutt	Merrigarn
	Alan Paget	Ungooroo Aboriginal Corporation
	Steve Johnson	Gunjeewong
	Derrick Vale	DFTV Enterprises
	Paul Boyd	Didge Ngunawal Clan
	Brayden Boyd Carroll	Didge Ngunawal Clan
	Arthur Fletcher	Kawul Pty Ltd trading as Wonn1 Sites
	John Wagner	Lower Hunter Aboriginal Incorporated
	Cody Mcutchen-King	Murra Bidgee Muilangari Aboriginal Corporation
	Steven Hickey	Widescope Indigenous Group
	Steven Talbott	Gomerioi Namoi TO
	Laurie Perry	Wonnaruah Nation Aboriginal Corporation
	Alison Lamond (archaeologist)	Jacobs
	Mark Terei	Jacobs
	James Brown	Hydro Aluminium
11 February 2021	Alan Paget	Ungooroo Aboriginal Corporation
	Steve Johnson	Gunjeewong
	Derrick Vale	DFTV Enterprises
	Paul Boyd	Didge Ngunawal Clan
	Brayden Boyd Carroll	Didge Ngunawal Clan
	Arthur Fletcher	Kawul Pty Ltd trading as Wonn1 Sites
	Steve Johnson	Gunjeewong
	Nura Smith	Lower Hunter Aboriginal Incorporated
	Ashley Sampson	AGA Services

Date	Fieldwork Representative	Organisation
	Kieran Sampson	Cacatua Culture Consultants
	Alexandra Seifertova (archaeologist)	Jacobs
	Mike Luger	Jacobs
	James Brown	Hydro Aluminium

5.3 Survey methodology

The survey was carried out on foot by a team of Aboriginal representatives and an archaeologist, and covered the area shown in Figure 5.1.

The survey investigated the Proposal Site in full, with the exception that areas assessed by field teams as having no potential for archaeological material to be present, for example because of previous impacts and ground disturbance, were not surveyed. The decision to exclude areas in this way was made in the field, through a consensus of all field team members. No sub-sampling of the Proposal Site was employed.

The ground survey team consisted of an archaeologist as well as Aboriginal representatives (see Table 5.1). The field survey aimed to locate Aboriginal objects and areas of Potential Archaeological Deposit (PAD), these being areas with the potential to contain subsurface archaeological material.

The survey recorded land disturbance, survey coverage variables (ground exposure and archaeological visibility) and landform types across the Proposal Site.

Data was captured using iPad notebooks, handheld GPS, and compact digital camera. Standard measuring tools such as tape measures and callipers were used.



 Proposal Site
 Survey units
 Motorway
 Waterbodies
 Roads
 Cadastre
 Railway

- ① Proposed Switchyard Area
- ② Proposed Plant Area
- ③ Proposed Buffer Area

0 250 500 m

1:10,013 at A4
 Coordinate System: GDA2020 MGA Zone 56

Data sources:
 Jacobs 2020
 NearMap 2020
 NSW Spatial Services

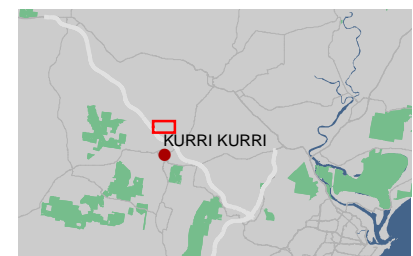


Figure 5-1 Aboriginal archaeological survey units

5.4 Survey Results

The results of the survey are provided below. A summary of the survey coverage and effective survey coverage is provided in Table 5.2. No Aboriginal objects were found during the survey. This is discussed in Section 6.

5.4.1 Survey unit 1: Proposed Plant and Buffer Area

Survey Unit 1 (SU1) is located within the footprint of the former Kurri Kurri aluminium smelter site which has been subject to demolition and remediation. The remediation includes the removal of all structural elements to a depth of approximately 1.5 metres and the filling of these areas with clean aggregate. The area consists of levelled crushed concrete aggregate with formed drainage ditches and spoil piles (refer to Figure 5.2). There was no natural ground surface visibility and it was impossible to determine any natural landforms.



Figure 5.2: SU1 remediated former smelter site (Source: Jacobs 2021)

5.4.2 Survey Unit 2: Northeast of Current Switch Yard

Survey Unit 2 (SU2) is located to the north and east of the existing electrical switchyard (part of the former Kurri Kurri aluminium smelter complex) and includes a drainage ditch, high voltage electricity easement and access track. Surface ground visibility is low (20 per cent) due to grass cover and area of introduced gravel fill (Figure 5.3). Exposures are limited to the access track and drain with 60 per cent visibility (Figure 5.4).



Figure 5.3: View west across start of SU2 (Source: Jacobs 2021)



Figure 5.4: View west across end of SU2 including access track (Source: Jacobs 2021)

5.4.3 Survey Unit 3: North of Current Switch Yard

Survey Unit 3 (SU3) is located to the north of the existing electrical switchyard (part of the former Kurri Kurri aluminium smelter complex) and includes a drainage ditch, access track and remnant vegetation. Surface ground visibility is low (10 per cent) due to grass and scrub cover (Figure 5.5). Exposures are limited to the access track with 50 per cent visibility (Figure 5.6).



Figure 5.5: Start of SU3 from electricity easement in SU2, view to the northwest (Source: Jacobs 2021)



Figure 5.6: To end of SU3, view to the southwest (Source: Jacobs 2021)

5.4.4 Survey Unit 4: West of Current Switch Yard

Survey Unit 4 (SU4) is located to the west of the smaller current electrical switchyard (part of the former Kurri Kurri aluminium smelter complex) and includes a raised mound running east-west adjacent to the switchyard, a drainage ditch, access track and remnant vegetation. Surface ground visibility is low (20-10 per cent) due to grass and scrub cover (Figure 5.7). Exposures are limited to the access track, and some small areas in between scrub, with 50 per cent visibility. The creek line is located 50 m west from the outer boundary of SU4.



Figure 5.7: Start of SU4, view to the east (Source: Jacobs 2021)



Figure 5.8: End of SU4, view to the north (Source: Jacobs 2021)

Table 5.2: Survey Coverage

Survey Unit	Landform	Survey Unit area	Visibility (%)	Exposure (%)	Effective coverage area (sq m)	Effective coverage %
SU1	Modified	35,500	0	0	0	0
SU2	Crest	6,200	20	15	186	3
SU3	Crest	2,700	10	10	27	1
SU4	Crest	2,790	10	10	27.9	1
	Mid-slope	810	20	10	16.2	2

6. Aboriginal Archaeological Sites

No Aboriginal archaeological surface sites were identified in any survey units during the survey. The high level of previous disturbance across the Proposal Site has removed all archaeological potential from the surface and top of the soil profile, which is clearly evidenced in SU1. Although visibility was limited in SU2, SU3, and SU4, previous land use activities, including the introduction of fill in SU2, mean that there is a low to nil likelihood of Aboriginal objects being identified on the surface, or in the top of the soil profile.

However, the entire Proposal Site is located on alluvium which has been shown to have archaeological potential at depth. This occurs in particular within areas associated with the creek lines that drain into the Wentworth Swamp system (refer to Section 3), including the Proposal Site. As a result, despite the substantial disturbance to the surface and upper soil profile, archaeological potential survives at depth beneath the Proposal Site.

It is not possible to investigate this archaeological potential as part of this assessment. Test excavation under the Code of Practice is not feasible here, due to the potential depth at which Aboriginal objects may be present (potentially under 1.5 m of the fill from earthworks associated with construction of the former Kurri Kurri aluminium smelter). In areas of piling, it is proposed to construct piled foundations to a depth of approximately 17 m which would impact deep alluvial deposits. Access to these areas is not currently possible due to the presence of the existing live high voltage switchyard. It is considered appropriate to undertake monitoring of the piling works with a methodology that includes provisions to assess and recover Aboriginal objects if they are identified. If objects are present, the location would be recorded on AHIMS, in accordance with s89a of the *National Parks and Wildlife Act 1974*.

In the areas of bulk excavation for the gas turbine footings and for the sediment retention and stormwater basin, test investigation under the Code of Practice is also not possible due to the depth of fill (potentially under 1.5 m of the fill) coupled with the depth of the underlying alluvial deposits. It is therefore proposed to undertake monitoring of the bulk excavation of both the turbine footings and sediment retention and stormwater basin. If Aboriginal objects are identified through monitoring, bulk excavation in the vicinity would cease while hand excavation is undertaken to assess and recover objects. If objects are present, the location would be recorded on AHIMS, in accordance with s89a of the *National Parks and Wildlife Act 1974*.

7. Summary

Previous archaeological assessments in the vicinity of the Proposal Site have identified a large number of sites including artefact scatters, and potential archaeological deposits. These sites are often located near water sources, particularly on elevated landforms. The long post-contact history of development in the area has resulted in destruction of a large number of sites.

Archaeological surveys were carried out on 12 January 2021 and 11 February 2021. On-site consultation with nominated site officers from the RAPs contributed to the development of management and mitigation recommendations, including recommendations for any further assessment. No aboriginal archaeological sites were identified within the Proposal Site. Potential for Aboriginal archaeological deposits to survive at depth was identified.

Site significance, potential impacts, cumulative impacts and management recommendations are detailed in the Kurri Kurri Gas Fired Power Station Aboriginal Cultural Heritage Assessment Report (ACHAR) (Jacobs 2021).

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Appendix A. AHIMS Search Results

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : Snowyhydro Kurri 2.5km bu

Client Service ID : 544459

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-0865	KK-IF-2	GDA	56	358141	6369492	Open site	Valid	Artefact : -	Isolated Find	98174,102135
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-0866	KK-IF-1	GDA	56	358157	6369780	Open site	Valid	Artefact : -	Isolated Find	98174,102231
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-1325	Swamp Creek RTA 10 IF (SWC RTA 10IF)	AGD	56	356447	6370271	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2102	
37-6-1341	Black Waterholes Creek RTA 1 IF	AGD	56	355826	6371730	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2102	
37-6-1342	Black Waterholes Creek RTA 2 IF	AGD	56	355388	6372208	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2102	
37-6-1343	Black Waterholes Creek RTA 3 IF	AGD	56	356293	6371108	Open site	Valid	Artefact : 1		102231
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2102	
37-6-1344	Black Waterholes Creek RTA 4 IF (BWC RTA 4 IF)	AGD	56	355416	6372102	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2102	
37-6-1355	Swamp Creek RTA 3	AGD	56	359052	6369135	Open site	Valid	Artefact : 10		102388
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2102	
37-6-1356	Swamp Creek RTA 4	AGD	56	356557	6370688	Open site	Valid	Artefact : 4		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2102	
37-6-1357	Swamp Creek RTA 5 IF	AGD	56	358943	6368993	Open site	Valid	Artefact : 1		102388
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2102	
37-6-1358	Swamp Creek RTA 6 IF	AGD	56	359229	6369057	Open site	Valid	Artefact : 1		102388
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2102	
37-6-1359	Swamp Creek RTA 7 IF	AGD	56	358425	6369259	Open site	Valid	Artefact : 1		102388
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2102	
37-6-1360	Swamp Creek RTA 8 IF	AGD	56	357269	6370282	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2102	
37-6-1361	Swamp Creek RTA 9	AGD	56	357005	6370549	Open site	Valid	Artefact : 7		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2102	
37-6-1362	Swamp Creek RTA 11 IF (formerly PAD9 Swamp Creek)	AGD	56	357630	6369700	Open site	Valid	Potential Archaeological Deposit (PAD) : 1, Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2096,2562	
37-6-1363	PAD11 Black Waterholes Creek	AGD	56	356091	6371356	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		102231

Report generated by AHIMS Web Service on 22/10/2020 for Alison Lamond for the following area at Datum :GDA, Zone : 56, Eastings : 354838 - 360337, Northings : 6368468 - 6374106 with a Buffer of 0 meters. Additional Info : Due diligence. Number of Aboriginal sites and Aboriginal objects found is 78

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

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : Snowyhydro Kurri 2.5km bu

Client Service ID : 544459

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	<u>Contact</u>	<u>Recorders</u>	Umwelt (Australia) Pty Limited - Individual users,Leila McAdam							<u>Permits</u> 2096
37-6-1957	KK09	GDA	56	358372	6371638	Open site	Valid	Artefact : 1		102231
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u> 3203
37-6-1958	KK10	GDA	56	357407	6371800	Open site	Valid	Artefact : 3		102231
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u> 3203
37-6-1959	KK11	GDA	56	357079	6371849	Open site	Valid	Artefact : 1		102231
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u> 3203
37-6-1960	KK12	GDA	56	356887	6371887	Open site	Valid	Artefact : 1		102231
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u> 3203
37-6-2004	KR01	GDA	56	357959	6370106	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u> 3201
37-6-2005	KR02	GDA	56	357528	6370404	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u> 3201
37-6-2006	KR03	GDA	56	357491	6370454	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u> 3201
37-6-2007	KR04	GDA	56	357367	6370539	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u> 3201
37-6-2008	KR05	GDA	56	357171	6370683	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u> 3201
37-6-2009	KR06	GDA	56	356187	6371481	Open site	Valid	Artefact : -		102231
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u> 3201
37-6-1961	KK13	GDA	56	356713	6372765	Open site	Valid	Artefact : 1		102231
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u> 3203
37-6-1962	KK14	GDA	56	356727	6372857	Open site	Valid	Artefact : 1		102231
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u> 3203
37-6-1963	KK15	GDA	56	356790	6373144	Open site	Valid	Artefact : 1		102231
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u>
37-6-1964	KK16	GDA	56	356790	6373144	Open site	Valid	Artefact : -		102231
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u>
38-4-1149	KK01 (Beresfield)	GDA	56	359679	6369869	Open site	Valid	Artefact : 3		
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u> 3151
38-4-1150	KK02 (Beresfield)	GDA	56	359819	6369944	Open site	Valid	Artefact : 3		
	<u>Contact</u>	<u>Recorders</u>	Australian Museum Consulting (AM Consulting),Mrs.Tessa Boer-Mah							<u>Permits</u> 3151
37-6-1953	KK03	GDA	56	359355	6370790	Open site	Valid	Artefact : 10		

Report generated by AHIMS Web Service on 22/10/2020 for Alison Lamond for the following area at Datum :GDA, Zone : 56, Eastings : 354838 - 360337, Northings : 6368468 - 6374106 with a Buffer of 0 meters. Additional Info : Due diligence. Number of Aboriginal sites and Aboriginal objects found is 78

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : Snowyhydro Kurri 2.5km bu

Client Service ID : 544459

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
45-3-3387	KK04 (Wyong)	GDA	56	357942	6371717	Open site	Valid	Artefact : 103, Potential Archaeological Deposit (PAD) : -	3203	
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	3151,3203	
37-6-1954	KK05	GDA	56	358577	6371627	Open site	Valid	Artefact : 17		102231
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	3203	
37-6-1955	KK07	GDA	56	356742	6372396	Open site	Valid	Artefact : 2		102231
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	3151,3203	
37-6-1956	KK08	GDA	56	359497	6370657	Open site	Destroyed	Artefact : 1		103000,10300 1
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	3203,3640	
38-4-1714	Hydro-AS05-14	GDA	56	360256	6373012	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
38-4-1715	Hydro-AS06-14	GDA	56	359994	6373142	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3050	Hydro-AS07-14	GDA	56	359003	6372353	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3051	Hydro-AS08-14	GDA	56	358265	6372585	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3052	Hydro-AS09-14	GDA	56	358412	6372339	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3053	Hydro-AS10-14	GDA	56	358096	6372326	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3054	Hydro-AS11-14	GDA	56	357628	6372468	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3055	Hydro-AS12-14	GDA	56	357175	6372186	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3056	Hydro-AS13-14	GDA	56	357378	6372130	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3057	Hydro-AS14-14	GDA	56	357432	6372247	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3058	Hydro-AS15-14	GDA	56	357565	6372127	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3061	Hydro-AS18-14	GDA	56	358062	6372025	Open site	Valid	Artefact : -		

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : Snowyhydro Kurri 2.5km bu

Client Service ID : 544459

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3062	Hydro-AS19-14	GDA	56	357827	6371996	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3063	Hydro-AS20-14	GDA	56	358459	6371828	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3064	Hydro-AS21-14	GDA	56	357637	6371864	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3065	Hydro-AS22-14	GDA	56	357458	6371685	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3059	Hydro-AS16-14	GDA	56	357531	6372061	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3060	Hydro-AS17-14	GDA	56	357897	6372119	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
38-4-1712	Hydro-AS03-14	GDA	56	360138	6373383	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
38-4-1713	Hydro-AS04-14	GDA	56	360085	6373261	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3066	Hydro-AS24-14	GDA	56	355859	6372140	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3067	Hydro-AS25-14	GDA	56	356555	6371753	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3068	Hydro-AS26-14	GDA	56	357247	6371141	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3069	Hydro-AS27-14	GDA	56	357148	6370939	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3070	Hydro-AS28-14	GDA	56	357219	6370703	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3071	Hydro-AS29-14	GDA	56	358225	6371002	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3072	Hydro-AS30-14	GDA	56	358420	6371046	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-3073	Hydro-AS31-14	GDA	56	359541	6371256	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : Snowyhydro Kurri 2.5km bu

Client Service ID : 544459

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-3872	Hydro PAD 1	GDA	56	357445	6371592	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	AECOM Australia Pty Ltd - Sydney,Doctor.Andrew Peter McLaren					Permits		
37-6-3926	RPS HG01	GDA	56	359573	6369800	Open site	Destroyed	Artefact : 1		
	Contact	Recorders	RPS Australia East Pty Ltd - Hamilton,RPS Australia East Pty Ltd - York Street Sydn					Permits	4597	
37-6-0267	Kurri Kurri No.1;	AGD	56	359420	6369460	Open site	Valid	Artefact : -	Open Camp Site	783,102388
	Contact	Recorders	A Djekic					Permits		
37-6-0268	Kurri Kurri No 2,;	AGD	56	359450	6369680	Open site	Valid	Artefact : -	Open Camp Site	783
	Contact	Recorders	A Djekic					Permits		
37-6-0269	Kurri Kurri No.3;	AGD	56	359480	6369790	Open site	Valid	Artefact : -	Open Camp Site	783,102388
	Contact	Recorders	A Djekic					Permits		
37-6-0270	No. 4 Kurri	GDA	56	359490	6369810	Closed site	Destroyed	Artefact : -	Open Camp Site	783,102135,10 2388
	Contact	Recorders	A Djekic,RPS Australia East Pty Ltd - York Street Sydney ,Mrs.Amanda Crick					Permits	4597	
37-6-0271	Kurri Kurri No.5;	AGD	56	359520	6369890	Open site	Valid	Artefact : -	Open Camp Site	102135,10238 8
	Contact	Recorders	A Djekic					Permits		
37-6-1644	Swamp Creek Catchment 5	AGD	56	356949	6370574	Open site	Valid	Artefact : 2		100062
	Contact Searle	Recorders	Ms.Tudur Llwyd Davies					Permits	2520,2660	
37-6-1645	Swamp Creek Catchment 4	AGD	56	357603	6369908	Open site	Valid	Artefact : 1		100062
	Contact Searle	Recorders	Ms.Tudur Llwyd Davies					Permits	2520,2660	
37-6-1650	Northern Swamp Tributaries 4	AGD	56	356724	6371757	Open site	Valid	Artefact : 29		100062,10223 1
	Contact Searle	Recorders	Ms.Tudur Llwyd Davies					Permits	2520,2660,3151,3203	
37-6-1652	Northern Swamp Tributaries 2	AGD	56	356637	6372207	Open site	Valid	Artefact : 2		100062,10223 1
	Contact Searle	Recorders	Ms.Tudur Llwyd Davies					Permits	2520,2660,3151,3203	
37-6-3794	Kurri Kurri SC01	GDA	56	357447	6369296	Open site	Valid	Artefact : -		
	Contact	Recorders	EMM Consulting - St Leonards - Individual users,Mr.Andrew Crisp					Permits		
37-6-3969	Hydro-IA35-15	GDA	56	357209	6371474	Open site	Valid	Artefact : -		
	Contact	Recorders	AECOM Australia Pty Ltd - Sydney,Doctor.Andrew Peter McLaren					Permits		

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