



APPENDIX F

Aboriginal cultural heritage assessment



Aboriginal Cultural Heritage Assessment

Wellington South Battery Energy Storage System

Prepared for AMPRY Australia Pty Ltd

October 2022

Aboriginal Cultural Heritage Assessment

Wellington South Battery Energy Storage System

AMPRY Australia Pty Ltd

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Acknowledgement of Country

EMM would like to acknowledge and pay respect to the traditional owners of the land on which the project is proposed, Wiradjuri Country. We would like to thank all members of the Aboriginal community who generously gave their time and knowledge regarding the Aboriginal cultural heritage values associated with the project.

Executive Summary

AMPYR Australia Pty Ltd (AMPYR) Shell Energy proposes to develop and operate the Wellington Battery Energy Storage System (the project). This involves the development of a large-scale battery energy storage system (BESS) with a discharge capacity of 500 megawatts (MW) and a storage capacity of 1,000 megawatt hours (MWh). The project also incorporates an on-site substation and connection infrastructure to facilitate transfer of energy to and from the electrical grid, and ancillary infrastructure. The site proposed to be developed is located within the Dubbo Regional Council Local Government Area (LGA) at 6773 Goolma Road, approximately 2.2 km north-east of the township of Wellington and 44 km south-east of the township of Dubbo.

The project is being assessed under Part 4, Division 4.7 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The project has been classified as a State significant development (SSD) under the EP&A Act, and as such requires an Environmental Impact Statement (EIS) to consider the environmental impacts of the project. This Aboriginal cultural heritage assessment (ACHA) has been prepared to support the EIS. It documents the results of archaeological investigations undertaken to identify the extent and significance of any physical remains and intangible values of past Aboriginal visitation, use and occupation within the project area.

Aboriginal consultation for the ACHA has conformed with Heritage NSW's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW, 2010), and included provision of information on registered Aboriginal parties (RAPs), and notification of field survey associated with the project. The consultation process initially identified 19 Aboriginal stakeholder organisations with potential interest in the project area. Following a notification process, six responded to be registered for subsequent consultation through the project, including the Wellington Local Aboriginal Land Council (LALC) and a number of Wiradjuri traditional owner groups. The one-day field program included the participation of three of these organisations; Gallangabang Aboriginal Corporation, Wellington Valley Wiradjuri Aboriginal Corporation, and Binjang Wellington Wiradjuri Heritage Survey.

Previous archaeological studies of the region have all provided a consistent and good understanding of the past peopling, visitation and occupation of the project area and surrounds. A combination of cultural and compliance-based investigations demonstrate that long-term occupation in the Wellington Valley region was likely centred on major rivers, such as the Wambuul-Macquarie River and Bell's River, with more sporadic short-term occupation and/or transitional use associated with lower order waterways. Where watercourses are non-permanent and/or ephemeral, visitation was likely restricted to incidental use related to transitioning from place to place. Based on nearby cultural heritage management studies, the cultural materials that demonstrate this past behaviour are almost exclusively in the form of surface and/or shallowly buried stone artefacts. Culturally modified trees are also present in the region where historical clearing has been limited. These sites are typically found adjacent to water courses, and/or on elevated flat areas adjacent to water. These cultural materials are sparse, and often consist of single or <10 stone artefacts, reflecting the transitory/seasonal nature of activities in the region.

With specific reference to the project area, there is one documented site within the project impact area, however it is likely that the location of this site is in error. As discussed in Section 5.4, evidence suggests this site was recorded as part of investigations relating to the adjacent Wellington Wind Farm assessment and this site is likely on the western side of the project area boundary fence line (ie ~10 m west of the current recorded location). It could not be relocated in its recorded location during the archaeological survey undertaken for this assessment, further demonstrating that the recorded location is likely in error. Further, the potential for cultural materials is considered low given its environmental context away from reliable water, and the historical and modern activities that have occurred within the project area. Specifically, historical agricultural practices have likely destabilised the already shallow soils of the project area (commonly <15 cm), and resulted in widespread erosional processes across the project area. Consultation with RAP site officers during the site inspection resulted in general agreement that the shallow soils of the project area are unlikely to retain subsurface archaeological potential.

Overall, no cultural materials were identified from the archaeological survey, and this ACHA considers the project area to have low potential to feature cultural materials as surface or subsurface deposits. No intangible values for the project area have been identified to date. As such, the project will not impact any known Aboriginal objects, and if unknown objects do occur, they are likely to be present as sporadic, low density stone artefact sites of low archaeological significance which would not warrant further investigative measures or mitigation.

Recommendations are proposed for inclusion in the EIS to guide post-approval requirements for Aboriginal heritage. These include (further discussion is presented in Section 10.2):

- All site personnel should be made aware that there are registered Aboriginal sites within the vicinity of the project area and therefore must not undertake ground disturbance outside of approved areas. Appropriate signage and temporary fencing should be erected around AHIMS 36-4-0203 to ensure no inadvertent impacts occur to this site.
- Prior to ground disturbance, an Aboriginal cultural heritage management plan (ACHMP) must be developed by a heritage specialist in consultation with the Aboriginal stakeholders and consent authority to provide the post-approval framework for managing Aboriginal heritage within the project area. The ACHMP should include the following aspects:
 - a workshop between the archaeologists and the RAPs prior to undertaking the ACHMP to develop the approach to the document as requested by WVVAC during the ACHA review period;
 - process, timing, and communication methods for maintaining Aboriginal community consultation and participation through the remainder of the project;
 - description and methods for undertaking further Aboriginal heritage assessment, investigation and mitigation of any areas of the disturbance boundary that have changed following completion of the Aboriginal heritage assessment and/or during the final design and construction phases of the project;
 - procedures for managing the unexpected discovery of Aboriginal objects, sites and/or human remains during the project and delivered through an Aboriginal Cultural Heritage Induction Program developed and delivered by the RAPs onsite to ensure culture, heritage and artefactual materials are identified and managed appropriately;
 - procedures for the curation and long-term management of cultural materials if recovered as part of unexpected finds; and
 - processes for reviewing, monitoring, and updating the AHMP as the project progresses.
- The Construction Environment Management Plan (CEMP), or equivalent, should reinforce how the cultural landscape is considered throughout the project and detail the rehabilitation of the project area. This should be undertaken in consultation with the RAPs. The CEMP should be distributed to the RAPs for their records.
- Consultation should be maintained with the RAPs during the finalisation of the assessment process and throughout the construction phase of the project. Details for how this consultation should be undertaken will be outlined in the ACHMP.
- A copy of the ACHA should be lodged with AHIMS and provided to each of the RAPs.

Where the heritage consultant changes through the project, suitable hand over should occur to minimise loss or mistranslation of the intent of the information, findings and future steps in heritage management.

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1 Introduction

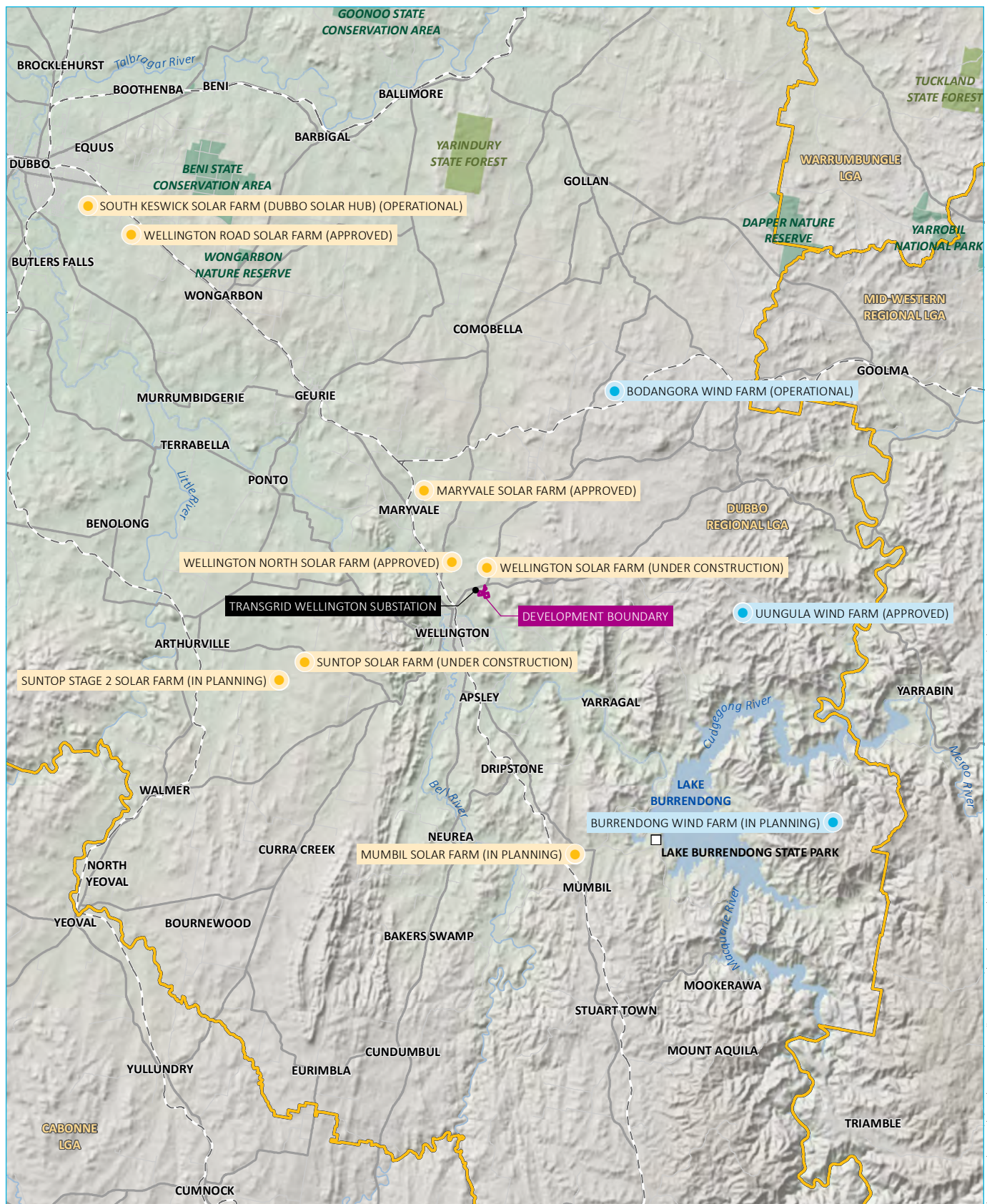
1.1 Background

AMPYR Australia Pty Ltd (AMPYR) and Shell Energy (Shell) proposes to develop and operate the Wellington Battery Energy Storage System (the project). This involves the development of a large-scale battery energy storage system (BESS) with a discharge capacity of 500 megawatts (MW) and a storage capacity of 1,000 megawatt hours (MWh). The project also incorporates an on-site substation and connection infrastructure to facilitate transfer of energy to and from the electrical grid, and ancillary infrastructure.

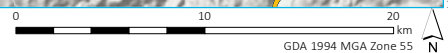
The site proposed to be developed is located within the Dubbo Regional Council local government area (LGA) at 6773 Goolma Road at Wuuluman, approximately 2.2 km north-east of the township of Wellington and 44 km south-east of the township of Dubbo. The project will be developed within privately owned land (Lot 32 DP 622471) and will incorporate either an overhead or underground transmission line and upgrade works to Wellington substation in the adjoining TransGrid owned landholding (Lot 1 DP 1226751). Physical infrastructure associated with the BESS will occupy an area of approximately 13 ha, however during construction, the project will require a disturbance area of approximately 19 ha. The project is shown in its regional and local context in Figure 1.1 and Figure 1.2, respectively.

The project will complement nearby renewable energy generation assets such as the Wellington Solar Farm the approved and Uungula Wind Farm by smoothing out fluctuations in electricity supply from these new intermittent power sources, potentially also balancing out price increases during peak demand. In operation, the project will be one of the largest battery projects in NSW and will contribute to the overall storage capacity and reliability of the National Electricity Market (NEM). The project also supports state and Commonwealth emission commitments by facilitating renewable energy input into the grid network during periods of low renewable energy generation.

The project is State significant development (SSD) in accordance with Schedule 1, Clause 20 of State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) (now consolidated into the *SEPP (Planning Systems) 2021*). A development application for the project is required under Part 4, Division 4.7 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).



Source: EMM (2022); DPIE (2022); DFSI (2017); GA (2011); ASGC (2006)

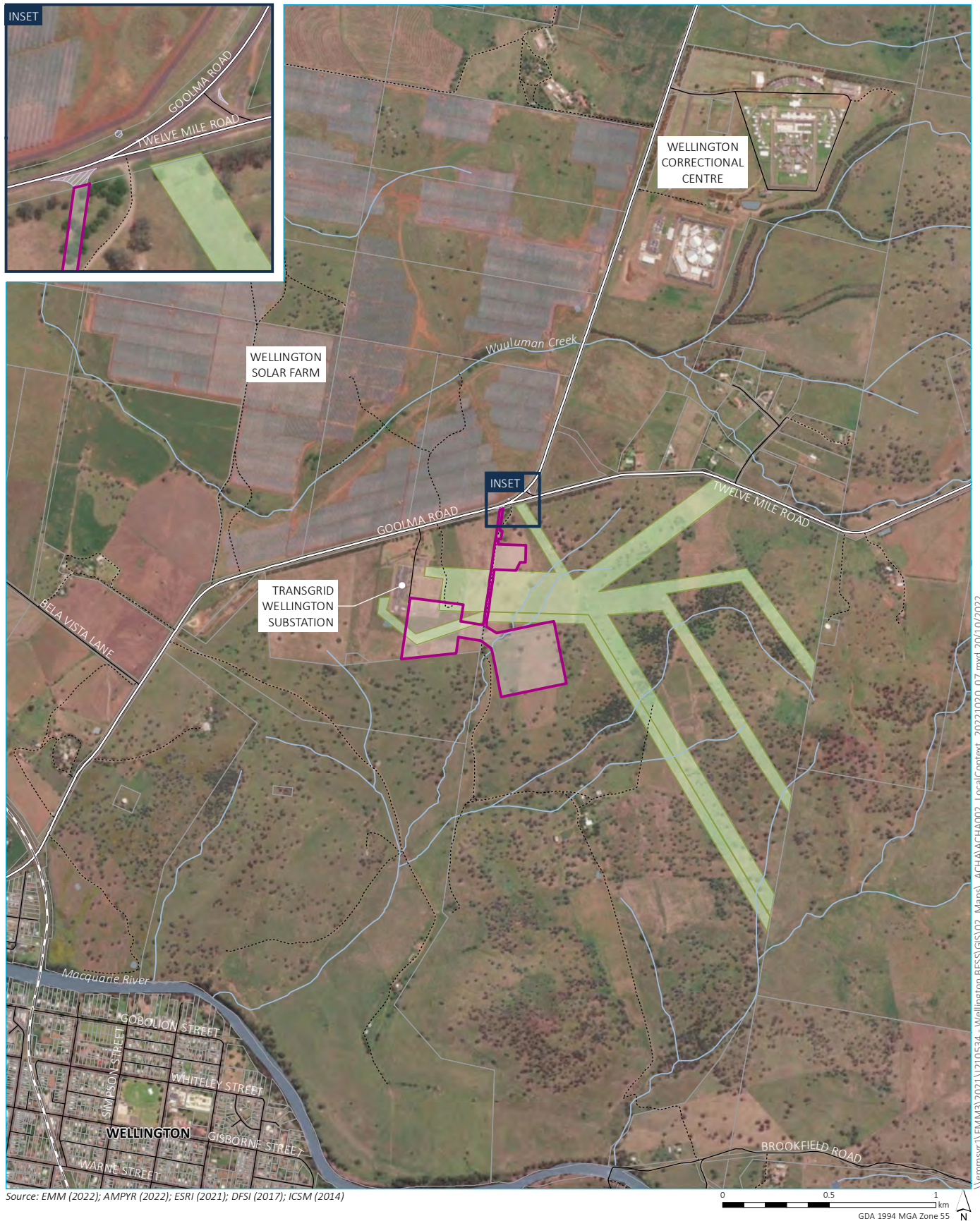


KEY

- Development boundary
- Lake Burrendong State Park
- Rail line
- Major road
- Minor road
- River
- Named waterbody
- Local government area
- NPWS reserve
- State forest
- Renewable energy project**
- Solar farm
- Wind farm

Regional setting

Wellington Battery Energy Storage System
Aboriginal cultural heritage assessment
Figure 1.1



KEY

- Development boundary
- Cadastral boundary
- Impact area associated with road upgrades
- Freehold easement
- Rail line
- Major road
- Minor road
- Vehicular track
- Watercourse/drainage line
- Waterbody

Local context

Wellington Battery Energy Storage System
Aboriginal cultural heritage assessment
Figure 1.2

1.2 Assessment requirements

The assessment was prepared in accordance with the requirements of the NSW Department of Planning, Industry and Environment (DPIE), which are set out in the Secretary's Environmental Assessment Requirements (SEARs) for the project, issued on 1st October 2021. The SEARs identify matters which must be addressed in the project Environmental Impact Statement (EIS). This report follows SEARs relating to Aboriginal heritage and has been prepared in accordance with the following NSW government guidelines:

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

Table 1.1 lists the requirements for the project relevant to this assessment and references where they are addressed in this report.

Table 1.1 SEARS for the assessment of Aboriginal cultural heritage

Requirement	Section addressed
Aboriginal Cultural Heritage –	
<ul style="list-style-type: none">• An assessment of the impact to Aboriginal cultural heritage items (cultural and archaeological) in accordance with the <i>Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW</i> (OEH, 2011) and the Code of Practice for the <i>Archaeological Investigation of Aboriginal Objects in NSW</i> (DECCW, 2010).	This report
<ul style="list-style-type: none">• Provide evidence of consultation with Aboriginal communities in determining and assessing impacts, developing options and selecting options and mitigation measures (including the final proposed measures), having regard to the <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents</i> (DECCW, 2010).	Section 2 and Appendix B

Note: This report only includes matters relating to Aboriginal cultural heritage and not historical heritage, which is addressed in respective environmental impact statement (EIS) main documents and not in this document.

1.3 Project description

1.3.1 Project overview

The project consists of the construction and operation of a major grid-scale battery project immediately south-east of the TransGrid Wellington Substation. The project will involve the following components:

- construction and operation of the BESS compound, comprising between 1,400–6,200 pre-assembled battery enclosures housing lithium-ion battery packs and related control equipment, and transformers and inverters with a peak maximum generation capacity of 500 MW/1,000 MWh;
- construction and operation of an on-site BESS substation, comprising two 330 kilovolt (kV) transformer bays, 33/0.440 kV auxiliary transformers, and an auxiliary services building to house supporting equipment and systems;
- connection to the adjoining TransGrid Wellington Substation by way of an underground or aboveground transmission line and associated easement;
- upgrade of the TransGrid Wellington Substation, which may include an additional 330 kV switch bay with power transformers (which would be installed as an alternative to the transformer bays being located on the BESS site), switchyard bench extension to the south of the existing bench and relocation of security fencing; and
- ancillary infrastructure to facilitate construction and operation of the project, including improvements to the existing access road, a washdown bay for incoming vehicles, and a control and office building.

The project also involves a subdivision in order to separate the BESS from the remainder of the site which will continue to be used for farming and grazing.

A summary of the key aspects of the project is provided in Table 1.2. A more detailed description for the project is provided in this chapter. The works described in these sections are subject to detailed design.

Table 1.2 Key aspects of the project description

Key aspects	Description
Project area	
Address and legal description	6773 Goolma Road, Wuuluman (battery energy storage system and transmission line) described as Lot 32 DP 622471 and 6909 Goolma Rd, Wuuluman (transmission line and Wellington substation upgrade) described as Lot 1 DP 1226751.
Development boundary/disturbance area	The project will require a disturbance boundary of approximately 19 ha that will be required during project construction.
Operational boundary	Operational footprint including permanent infrastructure of up to 13 ha.
ACHA study area	The local and regional area considered to identify local and regional Aboriginal heritage context.

Table 1.2 **Key aspects of the project description**

Key aspects	Description
Environmental constraints near the project area	<p>The following constraints are present within the site:</p> <ul style="list-style-type: none"> • nearby sensitive receivers, the closest of which being a resident along Twelve Mile Road, approximately 800 m north-east of the site; • the presence of a tributary to Macquarie River and associated riparian vegetation; • the presence of native vegetation and its associated ecosystem and species values; and • a portion of the site is within a designated bushfire prone area. <p>The project has been designed to avoid these constraints.</p>
Physical layout and design	
Layout	<p>The proposed BESS will generally comprise the following components:</p> <ul style="list-style-type: none"> • lithium-ion (Li-ion) batteries inside battery enclosures; • power conversion systems (PCS) incorporating inverters and transformers; • an aboveground or underground transmission line to the Wellington Substation; • an on-site substation comprising two 330 kilovolt (kV) transformer bays and ancillary infrastructure; • cabling and collector units; and • an Asset Protection Zone (APZ).
Mitigation measures	<p>The project has been sited to avoid environmental constraints within or near the site while minimising distances to the TransGrid Wellington Substation. Key mitigation measures considered in the project design include:</p> <ul style="list-style-type: none"> • avoidance of higher condition native grassland and woodland in project siting and selection of disturbance area (refer Section 6.1 of the EIS); • suitable APZs incorporated in design of proposed infrastructure and disturbance area (refer Section 6.5 of the EIS); • construction of noise attenuation/acoustic barriers (wall/retaining wall and batter or earth mounds) four metres in height to the north, east, south and west as a means of reducing potential noise impacts on nearby residential receivers (refer Section 6.3 of the EIS); and • planted landscaping around project infrastructure to minimise visual impacts (refer Section 6.9 of the EIS).
Ancillary infrastructure and upgrades	<p>The project will include the following ancillary components and upgrades:</p> <ul style="list-style-type: none"> • an upgrade to the existing site access (currently at the intersection of Goolma Road and Twelve Mile Road) to facilitate safer connection to roadway network and to facilitate the entry of larger construction vehicles; • upgrades to existing access tracks within the project boundary; • connection to the switchyard in adjoining TransGrid Wellington substation; • upgrade of the TransGrid Wellington Substation, which may include an additional 330 kV switch bay with power transformers (which would be installed as an alternative to the transformer bays being located on the BESS site), switchyard bench extension to the south of the existing bench and relocation of security fencing; • control and office building and associated parking; • drainage and stormwater management; • ancillary infrastructure including security fencing, lighting and closed-circuit television; and • connection to utilities (telecom, sewerage, etc).

Table 1.2 **Key aspects of the project description**

Key aspects	Description
Built design, materials and finishes	<p>Project enclosure components and cabinets will be light in colour to assist with heat management and made of steel.</p> <p>The control and office building will be a prefabricated building comprising a lunch room, office and ablutions room. The building will be assembled onsite and built to a height of 5 m tall. The building will be made of Trimclad steel or similar and grey in colour.</p> <p>Upgrade of the Wellington substation will comprise an extension to the existing infrastructure elements on that site.</p>
Design elements subject to change during detailed design	<p>Detailed design for the project has yet to be completed. The following design elements may be amended throughout the detailed design process:</p> <ul style="list-style-type: none"> • the layout of the BESS units and substation infrastructure; • the transmission line alignment and arrangement (ie either above ground on steel lattice tension structures and poles or underground); • the control and office building (material, finishes); • works at the TransGrid Wellington substation and switchyard to accommodate project connection; and • the location of attenuation features (noise wall/bunds) and fencing.
Plans and figures illustrating the layout and design in plan-view and cross section	An overview of the project layout is provided in Figure 3.1.
Specifications	
Discharge capacity	Up to 500 MW.
Storage capacity	Up to 1,000 MWh or two hours of maximum discharge capacity.
Typical operating cycle	One cycle per day on average assumed for assessment.
BESS compound components	<p>Specific component requirements are subject to selection of the potential technology provider. The BESS compound will comprise:</p> <ul style="list-style-type: none"> • 1,400–6,200 pre-assembled battery enclosures incorporating power conversion systems, thermal management systems, and safety systems; • 150–300 inverters/transformers; and • ancillary infrastructure (eg electrical switchroom, a control and office building, security fencing). <p>Battery enclosures will be 3 m tall.</p>
BESS substation components	<p>An on-site substation will comprise:</p> <ul style="list-style-type: none"> • two 330 kV transformer switch bays; and • 33kV indoor switchgear housed in portable substation containers. <p>The tallest component of the substation will be the tips of bushings, approximately 11 m tall, however the bulk of the unit will be 9 m tall.</p>
Connection infrastructure	<p>An approximate 500 m 330 kV transmission line will extend from the BESS substation.</p> <p>TransGrid has advised that the Wellington Substation upgrade works may incorporate installation of one new 330 kV switch bay and multiple transformers (which would be installed as an alternative to the transformer bays being located on the BESS site), and may be installed in stages to coincide with the staged construction of the BESS should a staged approach be adopted.</p>
Construction	
Capital investment value	\$545 million AUD.

Table 1.2 **Key aspects of the project description**

Key aspects	Description
Construction activities	<p>Construction of the project will involve:</p> <ul style="list-style-type: none"> • civil and enabling works; • structural, mechanical and electrical works; • commissioning; and • demobilisation. <p>The project is anticipated to take approximately 12 months to construct.</p> <p>Construction of the project will require an area of approximately 12 ha to facilitate the movement of plant and equipment (disturbance footprint). This area will incorporate a temporary laydown area near the site access for the storage of materials and infrastructure prior to installation at the site.</p>
TransGrid connection works	<p>The project will connect to the Wellington Substation switchyard either via overhead or underground cables extending from the on-site substation.</p> <p>TransGrid has advised that the Wellington Substation upgrade works may incorporate installation of one new 330 kV switch bay and multiple transformers (which would be installed as an alternative to the transformer bays being located on the BESS site), and may be installed in stages to coincide with the staged construction of the BESS should a staged approach be adopted.</p>
Construction workforce	<p>The project will create up to approximately 100 construction employment opportunities, many of which are expected to be sourced from the Dubbo region and other surrounding regional areas.</p>
Construction scheduling and staging	<p>Construction of the project will be undertaken over a minimum of 8 months and up to a maximum of 12–18 months under normal circumstances.</p> <p>Construction of the project may be undertaken as a single stage, or over two stages.</p> <p>For the staged construction scenario, Stage 1 would likely include 300 MW installed discharge capacity, all civil and enabling works, installation of batteries, one transformer and switchgear and associated structural, mechanical and electrical works, and connection to the substation. Stage 2 would consist of 200 MW, including installation of a second transformer and associated switchgear and batteries.</p> <p>It is anticipated that construction of Stage 2 would commence approximately 6–12 months following completion of Stage 1 works.</p>
Construction hours	<p>Construction of the project will be undertaken in accordance with the recommended standard/normal hours as defined by the <i>Interim Construction Noise Guideline</i> (DECC 2009) and <i>Draft Construction Noise Guideline</i> (EPA 2021) being:</p> <ul style="list-style-type: none"> • Monday to Friday: 7.00 am to 6.00 pm; • Saturday: 8.00 am to 1.00 pm; and • no works of Sunday and public holidays. <p>Some exceptions may be made for low impact works and extraordinary circumstances.</p>
Vehicle movements	<p>The following maximum vehicle movements are predicted (subject to detailed design):</p> <ul style="list-style-type: none"> • an average of up to 100 passenger vehicles per day (100 in and 100 out) during the construction works phase; • an average of up to 60 heavy vehicles per day (60 in and 60 out) during the construction works phase; and • up to 20 oversize overmass (OSOM) vehicles during the construction works phase. <p>Average daily heavy vehicle movements during the construction phase will generally be significantly lower than outlined above as the delivery of enclosures is anticipated to occur in batches.</p>

Table 1.2 **Key aspects of the project description**

Key aspects	Description
Transport	Project components (batteries, enclosures, PCS components and substation components) will be transported to the site from Sydney/Newcastle via the Mitchell Highway and Goolma Road, an approved B-double route. Construction materials sourced from surrounding concrete batching plants and hard rock quarries. Construction labour, equipment and plant will likely be sourced from Dubbo and other surrounding regional centres.
Water demand	Water used directly on site for construction is estimated at 10 mega litres (ML) used predominantly for dust suppression purposes. Water sources will be confirmed during detailed design but are likely to include a combination to be sourced from bore water located on the participating landholder's land, municipal water supply (in agreement with the relevant authority) and/or imported water in portable tanks.
Operation	
Operational activities	Operation of the project will involve: <ul style="list-style-type: none"> • maintenance and cleaning of equipment; • general office activities; and • waste removal.
Operational employment	The project will contribute to the employment of up to two employees during operation.
Operational life expectancy	The BESS is expected to operate for 20 years. At the end of operational life, this may be extended subject to the replacement of components.
Operational hours	The BESS will operate 24 hours a day, 7 days a week and be operated remotely.
Vehicle movements	Up to 4 trips per day (4 in-bound and 4 out-bound), comprising: <ul style="list-style-type: none"> • staff vehicles up to 3 per day (3 in-bound and 3 out-bound); and • heavy vehicles up to 1 per day transporting replacement parts and equipment as required. Vehicle movements to and from the site will occur infrequently during operations, primarily for scheduled maintenance.
Decommissioning	
Decommissioning timing	At the end of the operational life of the BESS the project will either be replaced and upgraded or built infrastructure will be removed and the site rehabilitated.
Decommissioning works	Works undertaken during decommissioning will not exceed intensity associated with construction works and is expected to take up to 8 months.

1.3.2 Project area and location

The project will be developed within privately owned Lot 32 DP 622471 and will incorporate either an overhead or underground transmission line and upgrade works to Wellington substation in the adjoining TransGrid owned landholding (Lot 1 DP 1226751). The Wellington Substation is located approximately 300 m west of the proposed location of the BESS substation.

Lot 32 DP 622471 is proposed to be subdivided from the remainder of the landholding which will continue to use for grazing and agricultural purposes.

The 'project area' referenced throughout this report comprises the development boundary, along with the minor additional impact area associated with proposed site access and road upgrade works as recommended in the traffic impact assessment report (refer Appendix L of the EIS) as shown in Figure 1.2.

1.3.3 Physical disturbance

Permanent project infrastructure will occupy an area of up to 13 ha. During construction, the project will require a disturbance area of up to 19 ha (referred to as the development boundary).

Vegetation clearing, cut and fill and bulk earthworks will be required to establish desired design levels to facilitate project infrastructure. Gravel cover will be established to allow for a managed surface that is partially permeable. Project infrastructure and equipment will either be established on concrete pads or mounted on skids affixed to the concrete pads. Depending on further detailed design, piled foundations may be required in certain areas to accommodate project infrastructure. The existing access track will be improved (road base), realigned and extended to the project infrastructure area.

Limited ground disturbance may also be required to facilitate a temporary construction compound/laydown area and washdown area at the site entrance. The siting of this area will be clear of established trees and located mostly within previously disturbed areas.

Areas disturbed during construction and not required for the operation of the project will be rehabilitated following completion of construction. An asset protection zone will be established and maintained on an ongoing basis for bushfire protection purposes.

1.4 Legislative context

There are several Commonwealth and state Acts (and associated regulations) that manage and protect Aboriginal cultural heritage. These are summarised in Table 1.3, and further details of the Acts are provided in (Appendix A).

Table 1.3 Commonwealth and State legislation relevant to the project.

Legislation	Description	Relevant to the project?	Details
Commonwealth			
<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Recognises sites with universal value on the World Heritage List (WHL). Protects Indigenous heritage places with outstanding heritage value to the nation on the National Heritage List (NHL), and significant heritage value on the Commonwealth Heritage List (CHL).	No	There are no Indigenous heritage places within the project area that are listed on the WHL, NHL, or the CHL.
<i>Native Title Act 1993</i>	Administers rights and interests over lands and waters by Aboriginal people. Provides for negotiation and registration of Indigenous Land Use Agreements (ILUAs). Often used in NSW to identify relevant stakeholders for consultation.	No	There are no active claims encompassing the project area.
<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i>	Preserves and protects declared areas and objects of particular significance to Aboriginal people that are under threat from injury or desecration.	No	There are no areas or objects within the project area subject to a Declaration under the Act.

Table 1.3 Commonwealth and State legislation relevant to the project.

Legislation	Description	Relevant to the project?	Details
State			
<i>Environmental Planning and Assessment Act 1979</i>	Requires environmental impacts, including to Aboriginal heritage, to be considered in land use planning. Provides for the development of environmental planning instruments, including State Environmental Planning Policies and Local Environmental Plans.	Yes	The proposed development is being assessed as an SSD project under Part 4, Division 4.7, of this Act, and is subject to project-specific environmental assessment and reporting requirements. These requirements (SEARs) stipulate that Aboriginal heritage impact assessment is required (in accordance with standard Heritage NSW procedures and guidelines) to assess whether the project has the potential to impact on Aboriginal objects, sites, or places of Aboriginal heritage significance.
<i>National Parks and Wildlife Act 1974</i>	Provides blanket protection for all Aboriginal objects and declared Aboriginal places. Includes processes and mechanisms for development where Aboriginal objects are present, or where Aboriginal Places are proposed for harm.	Yes	While elements of this Act do not apply to SSD projects, the potential impact on Aboriginal objects generally still requires consideration as a part of the assessment needs of such projects.
<i>Aboriginal Land Rights Act 1983</i>	Establishes Local Aboriginal Land Councils (LALCs). Allows transfer of ownership of vacant crown land to a Local Aboriginal Land Council. The Office of the Registrar, <i>Aboriginal Land Rights Act 1983 (ORALRA)</i> , registers Aboriginal land claims and maintains the Register of Aboriginal Owners. Often used in NSW to identify relevant stakeholders for consultation.	No	A request to search the Register of Aboriginal Owners was made to the ORALRA on 6 August 2021. The project area does not appear to have Registered Aboriginal Owners pursuant to Division 3 of the Act.

1.5 Authorship and acknowledgements

This report was prepared by Georgia Burnett and Megan Sheppard Brennand (Archaeologists) and reviewed by Ryan Desic (Associate, Heritage Team Leader).

EMM would like to thank registered Aboriginal parties (RAPs) for their involvement in ongoing consultation, knowledge sharing and fieldwork assistance. This includes RAP site officers who participated in the survey, namely Jamie Gray (Binjang Wellington Wiradjuri Heritage Survey), Bren Dougherty (Gallangabang Aboriginal Corporation), and Brenda Waters (Wellington Valley Wiradjuri Aboriginal Corporation).

EMM would like to thank project landholders who allowed the survey team to access their properties during the archaeological survey.

1.6 Limitations

This report is based on existing and publicly available environmental and archaeological information (including AHIMS data) and reports about the study area. The background research did not include any independent verification of the results and interpretations of externally sourced existing reports (except where the ground-truthing was undertaken). The report further makes archaeological predictions based on these existing data and targeted ground-truthing, and which may contain errors depending on the accuracy of these third party studies and the extent of ground-truthing (constrained to surface) investigations.

This report does not consider historical (non-Aboriginal) or built heritage unless specifically indicated.

2 Aboriginal consultation

2.1 Key findings

- Consultation with Heritage NSW has conformed with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW, 2010) and has included provision of contact information for registered Aboriginal parties (RAPs), and notification of the on-site and/or online activities associated with the project.
- The consultation process initially identified 19 Aboriginal stakeholder organisations with potential interest in the project area. Following a notification process, six responded to be registered for subsequent consultation through the project, including the Wellington Local Aboriginal Land Council (WLALC), Wellington Valley Wiradjuri Aboriginal Corporation and a number of Wirdajuri traditional owner groups.
- The one-day field program included the participation of three of these organisations, including Gallanggabang Aboriginal Corporation, Wellington Valley Wiradjuri Aboriginal Corporation, and Binjang Wellington Wiradjuri Heritage Survey. While invited, WLALC did not attend and could not be reached via phone or email.

2.2 The process

Aboriginal consultation for this project has been undertaken in accordance with procedures set out in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW, 2010). These guidelines identify a five-stage process:

1. Pre-notification – identification of the Aboriginal individuals and/or communities relevant to the project area by contacting several state government agencies.
2. Notification – contacting all Aboriginal individuals and/or communities identified in Stage 1 to determine their interest in being consulted during the project. This includes direct communication and the placement of advertisements in local media seeking further expressions of interest from Aboriginal individuals and/or communities that may have been missed through Stage 1. Those Aboriginal individuals and/or communities that wish to be consulted become a ‘registered’ Aboriginal party (RAP).
3. Presentation of project information/assessment methodology – briefing RAPs about the project and scope of any Aboriginal heritage assessment and investigations. This is usually undertaken through written correspondence, but can include meetings, and may undergo several iterations through the project as the nature of the assessment changes (eg surface ground-truthing may lead to a requirement for test excavations).
4. Impacts and mitigation strategies – discussion of potential impacts to cultural materials and mitigation options with the RAPs prior to developing the ACHA. This is often undertaken either onsite at the end of any field program and/or as part of Stage 4.
5. Report review – the RAPs are provided an opportunity to review and comment upon the draft ACHA, to contribute input into the overall findings, significance and management of cultural heritage.

2.3 This project

Aboriginal consultation for this project has been undertaken in accordance with procedures set out in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW, 2010). These guidelines identify a four-stage process, which is summarised for the project in Table 2.1. A complete consultation log is provided in Appendix B.1.

Overall, the consultation process identified 19 Aboriginal stakeholders in the region (Appendix B.2). Subsequently following a notification process, six of these registered an interest in the project (Appendix B.3; Table 2.2). These included: Wellington Local Aboriginal Land Council (WLALC), Corroboree Aboriginal Corporation, Woka Aboriginal Corporation, Gallangabang Aboriginal Corporation, Wellington Valley Wiradjuri Aboriginal Corporation, and Binjang Wellington Wiradjuri Heritage Survey. Three of these organisations participated in the field investigation of the proposed activity: Gallangabang Aboriginal Corporation, Wellington Valley Wiradjuri Aboriginal Corporation, and Binjang Wellington Wiradjuri Heritage Survey. Regretfully, the WLALC could not attend the site inspection and could not be contacted on the day despite numerous attempts.

Table 2.1 Summary of Aboriginal consultation undertaken for the project

Consultation stage	Description	Date Initiated	Date Completed	Notes
1	Government Agency Pre-Notification	6 August 2021	-	Additional details provided in Appendix B.4.
	Advertisement in the <i>Daily Liberal</i>	1 September 2021		A tearsheet is provided in Appendix B.4.
	Notification and registration of potential Aboriginal stakeholders	31 August 2021	15 September 2021	Additional details are provided in Appendix B.4.
2/3	Presentation of information about the proposed project; and gathering information about cultural significance	24 September 2021	22 October 2021	Additional details are provided in Appendix B.5.
	Site investigation	1 December 2021		Attended by three RAPs.
4	Review of draft report	9 February 2022	9 March 2022	Additional details are provided in Appendix B.6.
		6 September 2022	6 October 2022	Additional details are provided in Appendix B.6.

Table 2.2 List of registered Aboriginal parties for the project

Organisation	Contact
Wellington Local Aboriginal Land Council	CEO
Corroboree Aboriginal Corporation	Marilyn Carroll-Johnson
Woka Aboriginal Corporation	Steve Johnson
Gallangabang Aboriginal Corporation	Mel Chown (formerly Brad Bliss)
Wellington Valley Wiradjuri Aboriginal Corporation	Brad Bliss
Binjang Wellington Wiradjuri Heritage Survey	Jamie Gray

2.4 Aboriginal stakeholder feedback

Gallangabang Aboriginal Corporation and Wellington Valley Wiradjuri Aboriginal Corporation provided letter responses to the proposed assessment methods letter dated 24 September 2021 (Stage 2/3 of the consultation process). Overall, Gallangabang Aboriginal Corporation and Wellington Valley Wiradjuri Aboriginal Corporation agreed with the proposed assessment methods. Some minor amendments were noted and are summarised below, along with EMM's response:

- Both groups highlighted that the spacing of survey participants should be adjusted to the on-site conditions, and reduced to <5 m where required. EMM agreed that survey would be tailored to conditions at the time of survey.
- Both groups requested if test excavation were to be required, test pits should be spaced no further than 10 m apart, unless unavoidable due to geographic features (such as creeks). EMM noted that test excavations are not proposed at this time and the need would be determined based on the findings of the field survey in conjunction with the final project design.
- Both groups noted that timeframes may need to be adjusted to accommodate increased demand for field staff. EMM noted that plenty of notice and flexibility would be given to attend site.
- Any artefacts recovered during on site investigations should be returned to site and reburied following a smoking ceremony to cleanse the site and artefacts, and no single RAP should be given custody of any cultural material.
- Both groups noted knowledge of undocumented sites of high importance to the local community in the broader region. Noted that none of these sites were present within or nearby the project area.
- Both groups raised concern about the inclusion of outsiders in the consultation process and any on site activities. Wellington Valley Wiradjuri Aboriginal Corporation specifically raised concern regarding the inclusion of Woka Aboriginal Corporation, and requested further information. EMM noted that Woka Aboriginal Corporation was included as a stakeholder for the region in the list provided by Heritage NSW and Woka Aboriginal Corporation would need to give permission for their information to be released. EMM offered to seek permission, however no confirmation to proceed was provided.

EMM discussed various assessment and management options with RAPs during the one-day survey to gauge the suitability of certain measures. The outcomes of this discussion are summarised below:

- General agreement that the project area would have been of low utility to Aboriginal people, as it lacks permanent fresh water and other natural resources that would make it a desirable location for long term habitation (like ochre deposits or good-quality stone material, for example). It was suggested that while Aboriginal people would have utilised the whole landscape of the Wellington region, the use of the project area would have likely been limited to transitory use.
- General agreement that the shallow soils of the site lacked subsurface potential despite poor visibility, largely evident by outcropping bedrock visible at various points across the project area. It was noted that RAPs present have participated in archaeological excavation programs in the local area that demonstrated that the soils of the project area generally lack qualities that would preserve archaeological deposits.
- Bren Dougherty (Gallangabang Aboriginal Corporation) highlighted the importance of the Wambuul-Macquarie River to Aboriginal people of the Wellington area, and noted there are numerous undocumented but significant sites known to the local community that centred on the Wambuul-Macquarie River as a focal point of past occupation. He confirmed that none of these sites were present in the project area, and that the community would disclose their location on a need-to-know basis.

A draft version of this report, which included all background information, results, draft significance assessment and draft management recommendations, was issued to all RAPs on 9 February 2022 accompanied by an email specifying a 28-day timeframe for review. A reminder was provided to all RAPs as to the finalisation process and timeframes on 7 March 2022. Comments received during this period are summarised below (and see Appendix B.6):

- Wellington Valley Wiradjuri Aboriginal Corporation (WVWAC):
 - WVWAC advise that the project area was used ephemerally as a movement corridor between Wuuluuman Creek and the Wambuul-Macquarie River; and retained some aesthetic appeal. From a cultural perspective, WVWAC assert that the broader landscape has moderate cultural value.
 - WVWAC queried if the B Horizon could clearly be identified through visual inspection of the section in the season drainage line within the project area.
 - The WVWAC commented that developmental impacts, as opposed to avoidance, are compounding the continual intergenerational loss of cultural sites, cultural landscape and cultural knowledge in the region.
 - WVWAC Elders and Members recommend avoidance of all registered AHIMS sites.
 - WVWAC Elders and Members agree with the draft recommendations in the report however, add the following additional recommendations:
 - A workshop between the archaeologists and the RAPs prior to undertaking the ACHMP to develop the approach to the document.
 - An Aboriginal Cultural Heritage Induction Program be developed and delivered by the RAPs onsite to ensure culture, heritage and artefactual materials are identified and managed appropriately.
 - That the Construction Environment Management Plan (CEMP) also be distributed to RAPs for their records.

Following, the project area was amended in August 2022 to include an expanded area within the TransGrid Lot 1 DP 12265751 in support of the proposed upgrade works for the existing Wellington substation, along with minor additional impact area associated with proposed site access and road upgrade works as recommended in the traffic impact assessment report (refer Appendix L of the EIS) as shown in Figure 1.2. Following these amendments to the project area, the ACHA was updated and a revised draft was reissued to all RAPs on 6 September 2022 accompanied by an email specifying a 28-day timeframe for review. No comments were received in response.

3 Existing environment

3.1 Key findings

- The project area is situated within a well-resourced landscape, surrounded by a number of major water bodies and tributaries, including the Wambuul-Macquarie River. The Wambuul-Macquarie River, ~2 km south and south west of the project area and stretching over 900 km within the Murray-Darling basin, is considered a likely focal point of occupation due to the rich resources available along this waterway.
- However, the project area itself is resource scarce. No permanent water source is available within the project area, which is considered a key resource for long-term occupation. Limited raw material for stone tool manufacture is available in the general area, including the project area. No specific or rare flora or fauna are documented in the project area. Overall, considering the environment of the project area, past use would likely have been limited to transient use, as people moved through the landscape to more resource rich areas nearby.
- The project area is situated on a gently undulating plain, limiting site types to stone artefacts and/or culturally modified trees. The soil profiles of the project area are shallow loams likely no deeper than 15 cm considering topography, reducing the potential for buried cultural materials. The site has been subject to decades of agricultural use of varying intensity, further reducing the potential for buried cultural material.

3.2 Rationale

Understanding environmental context assists with predictions of archaeological potential, such as the likelihood of archaeological material being present in the landscape, its spatial distribution and its preservation. Landscape features were an important factor for the choice of camping and transitory and ceremonial areas used by Aboriginal people. Similarly, these landscape features and historical land-use plays a role in the level of preservation and the integrity of archaeological sites.

A landscape consisting of suitable topography, hydrology, geology and soils has strong links with natural resources that would have been available to, and sought after, by Aboriginal people. Flora and fauna would have provided food, tools and ceremony (culturally modified trees); proximity to fresh water was necessary for life and growing crops, as well as gathering fish and eels. Landscape features, such as sandstone overhangs, were useful for shelter; stone artefacts were manufactured from raw stone material that was collected from quarry sites; and stone arrangements relied on the landscape.

3.3 Landscape overview

Bioregions are relatively large land areas characterised by broad, landscape-scale natural features and environmental processes that capture large-scale geophysical patterns at an ecosystem scale. Sub-regions delineate significant geomorphic patterns within a bioregion, and are based on finer differences in geology, vegetation and biophysical attributes (Bannerman & Hazelton 1990; NSW NPWS 2003).

The project area is situated within the NSW South Western Slopes Bioregion and the Inland Slopes Subregion (NSW NPWS 2003). The South Western Slopes bioregion is bounded by six other bioregions including Bringalow Belt South to the north, and the Sydney Basin and the South Eastern Highlands to the east. The NSW South Western Slopes Bioregion covers the lower western slopes of the Great Dividing Range and extends from Albury in the south to Dunedoo in the north-east. Foothills and isolated ranges characterise the bioregion, almost all (93%) of which is situated within NSW. The bioregion covers just over 10% of the state.

The project area is situated within the Inland Slopes subregion, which is characterised by steep, hilly, undulating ranges and granite basins, lakes and wide valleys. The river valley of the Wambuul-Macquarie River is located approximately 2 km south of the project area and represents a significant natural feature that is well documented as an Aboriginal meeting place and an area with cultural value.

3.4 Geology and topography

The bioregion corresponds to the eastern part of the Lachlan Fold Belt, consisting of northerly and north-westerly trending folds of Cambrian to Early Carboniferous sedimentary and volcanic geology. The bioregion has a diverse range of geology, geomorphology, and flora and fauna. Granite basins surrounded by steep hills are common throughout the bioregion. Hilly landscapes are also present and follow sedimentary and volcanic rock, with topography of these landscapes defined by harder quartzite formations. Valleys are formed along formations of softer rock such as shale or slate. Lakes and wide valleys filled with Quaternary alluvium are the dominant landforms to the west and north of the bioregion. Also to the west are wide alluvial fans on the Riverine Plain deposited by high river discharges in the past – these discharges have formed gravel terraces in valleys and gravel outwash plains.

There are several occurrences of limestone with well-developed karst landscape and rich fossil assemblages in the region. Wellington Caves, located approximately 10 km south west of the project area, contains an abundance of extremely important Tertiary and Quaternary vertebrate fossils, the systematic study of which is ongoing.

The Inland Slopes Subregion is characterised by Ordovician to Devonian sedimentary folds and faults interbedded with volcanics and granite. Broadly speaking, soils tend to be shallow and stony, ranging from red subsoils on upper slopes to yellow topsoils, comprised of alluvial sands, loams and clays, on lower slopes.

According to the Dubbo 1:250,000 Metallogenic Geology Map (SI5504), the project site area is situated within a region of Silurian and Devonian geological sequences. The majority of the development area is within the Mumbil Formation, with some Cuga Burga Volcanics also present and Lue Beds neighbouring to the west. These formations and their occurrence are summarised in Table 3.1 and presented in Figure 3.2.

In relation to Aboriginal stone resources for the manufacture of stone tools, chert, quartz and tuff have been reported as raw materials used for artefacts in the region (cf. NGH 2018). However this would require surface outcrops to be present for Aboriginal resource extraction; no visible outcrops of these materials were observed during the archaeological survey (see Section 6). In addition, the presence of sandstone in certain environmental contexts (such as sandstone platforms within creek lines or rockshelters on sharp escarpments) could suggest the presence of grinding grooves or engraving sites. No such sites have been documented nearby (see Section 5.4), and no sandstone was observed during the archaeological survey. The low topography of the project area limits the potential for rockshelters.

Table 3.1 Main geological formations underlying the development area

Formation	Period	Geology
Mumbil Formation (Sm)	Middle/Late Silurian	Shale, limestone, chert and tuff
Cuga Burga Volcanics (Dcb)	Devonian	Keratophyre and quartz, lavas and tuffs, sediments and limestone
Lue Beds (Slu)	Silurian	Sandstone, phyllite, and slate limestone

3.4.1 Soil landscapes

Soil landscape classifications and their boundaries provide pre-defined areas that are classified by several geographic features, and which are informative for the archaeological investigation. They provide localised information including landform patterns, soils, geology, rock outcrop percentage, land use and vegetation. This information provides another layer to categorise the landscape for the predictive model, additional to what a topographic description can provide. Soil landscape information builds on underlying geology and describes the depths of residual soils and colluvial soils and identifies areas that are characterised by erosion or skeletal soils and exposed bedrock versus those that may contain a deeper profile where cultural material may be buried.

The topography of the project area is characterised by low undulating to rolling hills with elevation between 300–500 m. Local relief is unlikely to exceed 100 m and slopes are likely to be gentle to moderate (Figure 3.1). Soil landscape mapping by the Soil Conservation Service of NSW and DPIE indicates the majority of the project area is classified as the Nanima Soil Landscape (Murphy and Lawrie 1998). This soil landscape is classified as a shallow soil landscape on moderate to steep slopes with rock outcropping and is only located within 30 km of Wellington. The subsoils are derived from the underlying parent rock and the topsoil is mostly a homogenised layer derived from all parts of the slope. On the lower and upper slopes of the project area, this soil landscape typically presents as a dark red/brown loam to clay loam on valley floors (typically 15 cm, but up to 30 cm), overlying reddish brown clay to 120 cm, significantly decreasing in depth further up slope. Given the shallow nature of this topsoil, it is unlikely that cultural material will be present.

The Bodangora Soil Landscape is present in a small portion of the north section of the project area. While this soil landscape is similar to Nanima, it is a more hardsetting gravelly dark red/brown fine sandy loam to sandy clay loam (up to 35 cm) on lower and mid-slopes. Similarly to the Nanima soil landscape, this landscape is a transferred soil landscape made up of mostly eroded parent materials washed from areas directly upslope (ie colluvium). Given the shallow nature of these deposits is unlikely to be able to retain archaeological material of significant depth or stratification, even if previously deposited by past Aboriginal occupation.

Details of the soil landscapes are below in Table 3.2 and Figure 3.3.

Table 3.2 Soil landscapes of the project area (Murphy and Lawrie 1998)

Soil landscape and type	Landform pattern and hydrology	Landform elements	Slope and relief	Geology	Soil summary	Implications for archaeology
Nanima	Two unnamed ephemeral creeks on mid to lower slopes	Rolling low hills	Local relief 80–150 m, Slopes 5%–20%	Colluvial material with rock outcropping. Shale, limestone, chert and tuff	Dark red/brown loam to clay loam on valley floors (up to 15 cm) decreasing in depth further up slope (up to 30 cm)	Potential for surface cultural material to be present. Likely in a disturbed context, limiting potential for secure subsurface deposits.
Bodangora	Lower slopes	Low undulating hills	Local relief 0–100 m, Slopes 3%–10%	In situ and colluvial-alluvial material. Shale, limestone, chert and tuff	Hardsetting gravelly dark red/brown fine sandy loam to sandy clay loam (up to 35 cm) on lower and mid-slopes	Potential for surface cultural material to be present. Likely in a disturbed context, limiting potential for secure subsurface deposits.

3.5 Hydrology

This bioregion has three significant wetlands; the Barmedman/Yiddah Creek Floodplain, Lake Burrendong Reservoir and Wiesners Swamp. The project area is approximately 18 km northwest of Lake Burrendong, a man-made reservoir which the Wambuul-Macquarie River flows into. This is a flood prone region, due to the relatively low-lying topography.

However the project area is situated a relative distance from any of these watercourses on relatively low ground. The hydrology of the project area is presented in Figure 3.1. The nearest perennial watercourse is the Wambuul-Macquarie River (9th order), which is located approximately 2 km south of the project area. The headwaters of two ephemeral unnamed tributaries (1st order) of the Wambuul-Macquarie River run flow in a south-westerly direction adjacent to the north east of the project area. These drainage lines confluence in the southern half to the project area to a 2nd order ephemeral drainage line that edges on the western border of the project area.

Established creek corridors for any of these mapped waterways are not visible on current aerial photography, and likely only flow in periods when it is actively raining. Alternatively, the mapping may reflect erosion scours as a result of recent de-vegetation. In either case, they would not be suitable for prolonged or long term occupation in the past.

3.6 Flora and fauna

Animals in the area that would have been used by Aboriginal people as food resources include kangaroos and wallabies, possums and other small marsupials (such as bandicoots), snakes, emu, wild turkey, echidna, native ducks, fish and eels, and freshwater mussels. There are a diverse range of woodland and wetland birds recorded in the region which could have provided further resources and would have helped to maintain ecosystems, such as Brolga (*Grus rubicundus*), parrots and honeyeaters.

Due to the diversity of the bioregion there are a broad range of flora that would have provided resources for Aboriginal people. An assessment undertaken by NGH Environmental to the north of the project area (NGH 2017, 2018) found White Box (*Eucalyptus rossi*) grassy woodland to occur in the upper slopes sub-region of the NSW South Western Slopes Bioregion, and Blakely's Reg Gum (*Eucalyptus blakelyi*) and Yellow Box (*Eucalyptus melliodora*) grassy tall woodland on the lower hillslopes and valley flats. The vegetation communities occurring within the vicinity of the current project area would have been dominated by grey box (*Eucalyptus microcarpa*) and white cypress pine (*Callitris glaucophylla*).

The majority of the project area appears to be cleared grazing farmlands containing exotic grass species. Very little remnant vegetation has been identified in the project area. Generally speaking, for Aboriginal carved or scarred trees, the eucalypt gums and boxes listed above would have been suitable for cultural use, but likely have been cleared in the historic past.

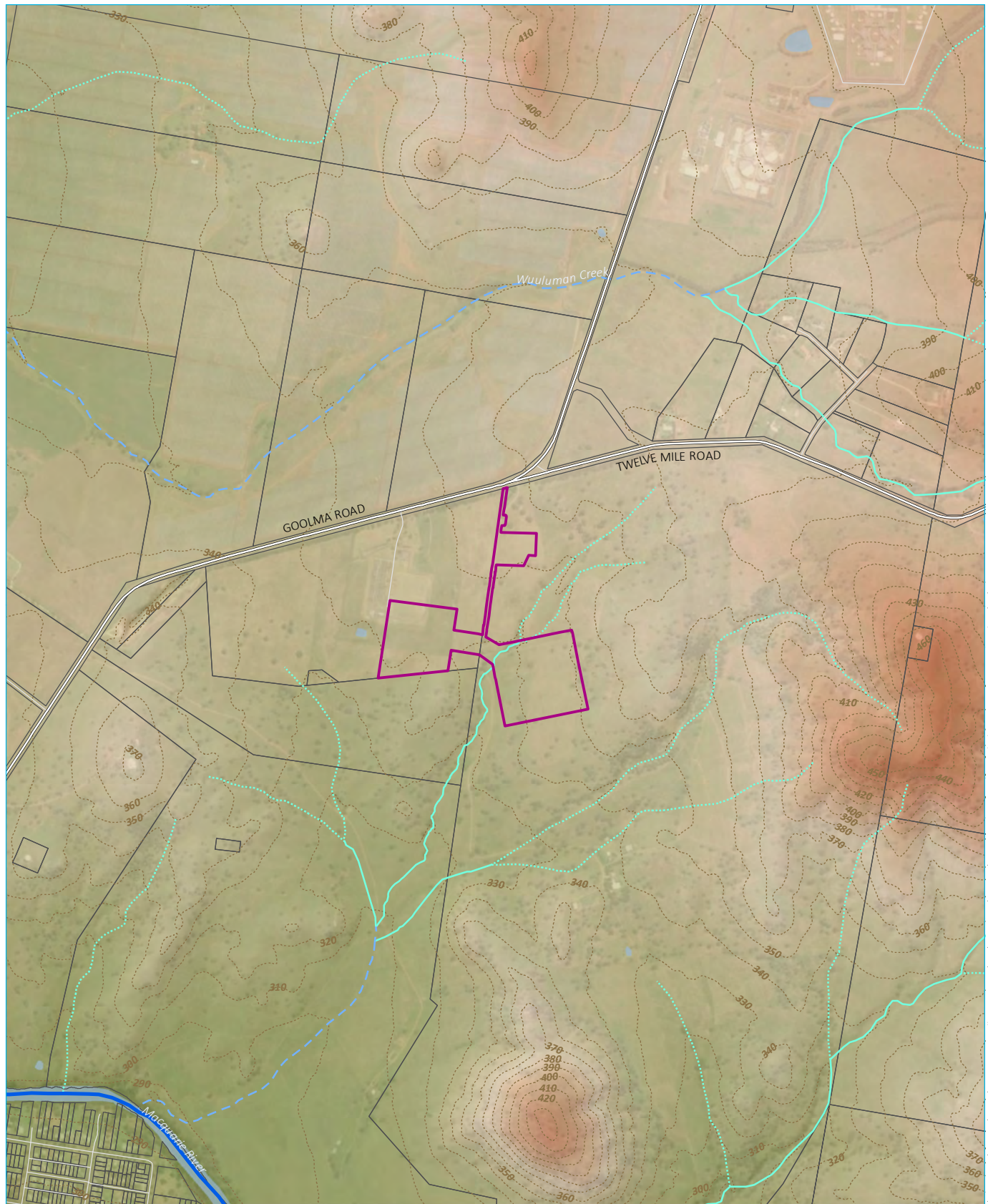
3.7 Land use and disturbance

A detailed review of the history of the locale is provided in EMM's (2021) historical heritage assessment developed for the project. A summary of the findings is provided below. Historical aerial imagery for the project area has also been obtained and is presented in Appendix C.

Following initial explorations at the turn of the 18th Century by explorers such as John Oxley (c. 1817), initially the area was slated as a convict settlement with Lieutenant Simpson having been appointed to transfer the convicts and soldiers to the area. The project area and surrounds were part of Nanima Estate, granted to Joseph Barrow Montefiore, and were primarily used for pastoral purposes, most likely the grazing of sheep for wool production.

The primary disturbances to the project area in this period are grazing and de-vegetation; with reference to the 1959 aerial, the small clusters of trees present across the project area are almost entirely removed by 1988. A handful of isolated mature trees are expected to be present in the project area. Such de-vegetation of the region is highly likely to have resulted in soil destabilisation and the formation of minor tributaries or erosion scours, some of which were observed during the site inspection (Section 6.4).

The project area has a history of intensive agricultural and pastoral use. The majority of the area has been utilised for grazing and crop production since European settlement in the mid 1800's. As evidence on current aerials, some ploughing and/or slashing has occurred within some areas of the project area, likely disturbing the topsoil due to the use heavy machinery. The impacts from farming activities over many decades has likely disturbed and potentially destroyed any cultural material present within the project area.

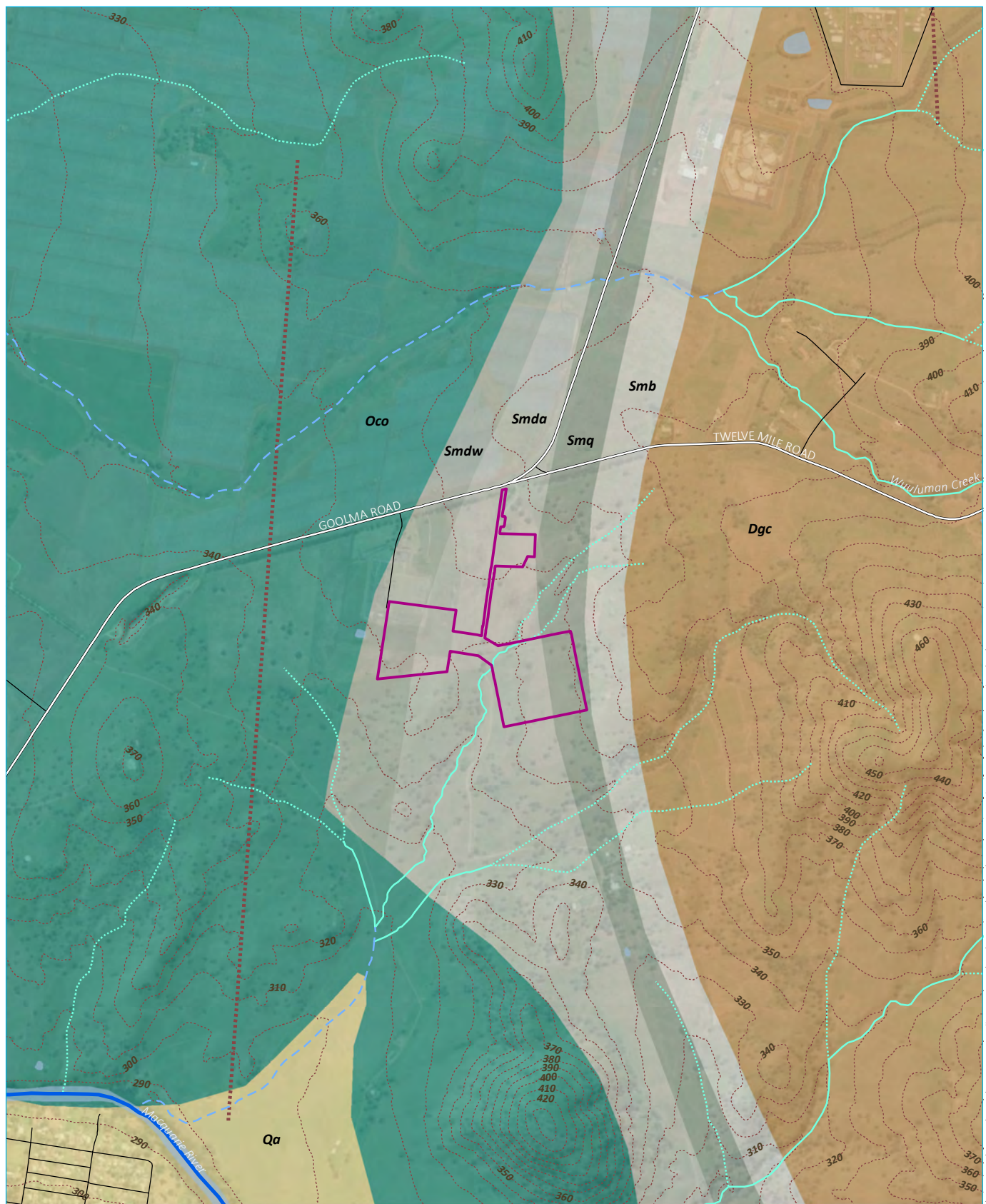


KEY

 Development boundary	 Waterbody	Elevation <div style="background: linear-gradient(to bottom, #f08080, #f0e68c, #90ee90); border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> 468 mAHD 281 mAHD
 Major road	Strahler stream order	
 Minor road 1st order	
 Topographic contour (10 m) 2nd order	
 Cadastral boundary 3rd order	
 9th order	

Topography and hydrology

Wellington Battery Energy Storage System
Aboriginal cultural heritage assessment
Figure 3.1



Source: EMM (2022); AMPYR (2022); ESRI (2021); DFSI (2017); DPI (2015); ICSM (2014); DMR (1999)

0 0.5 1 km
GDA 1994 MGA Zone 55

KEY

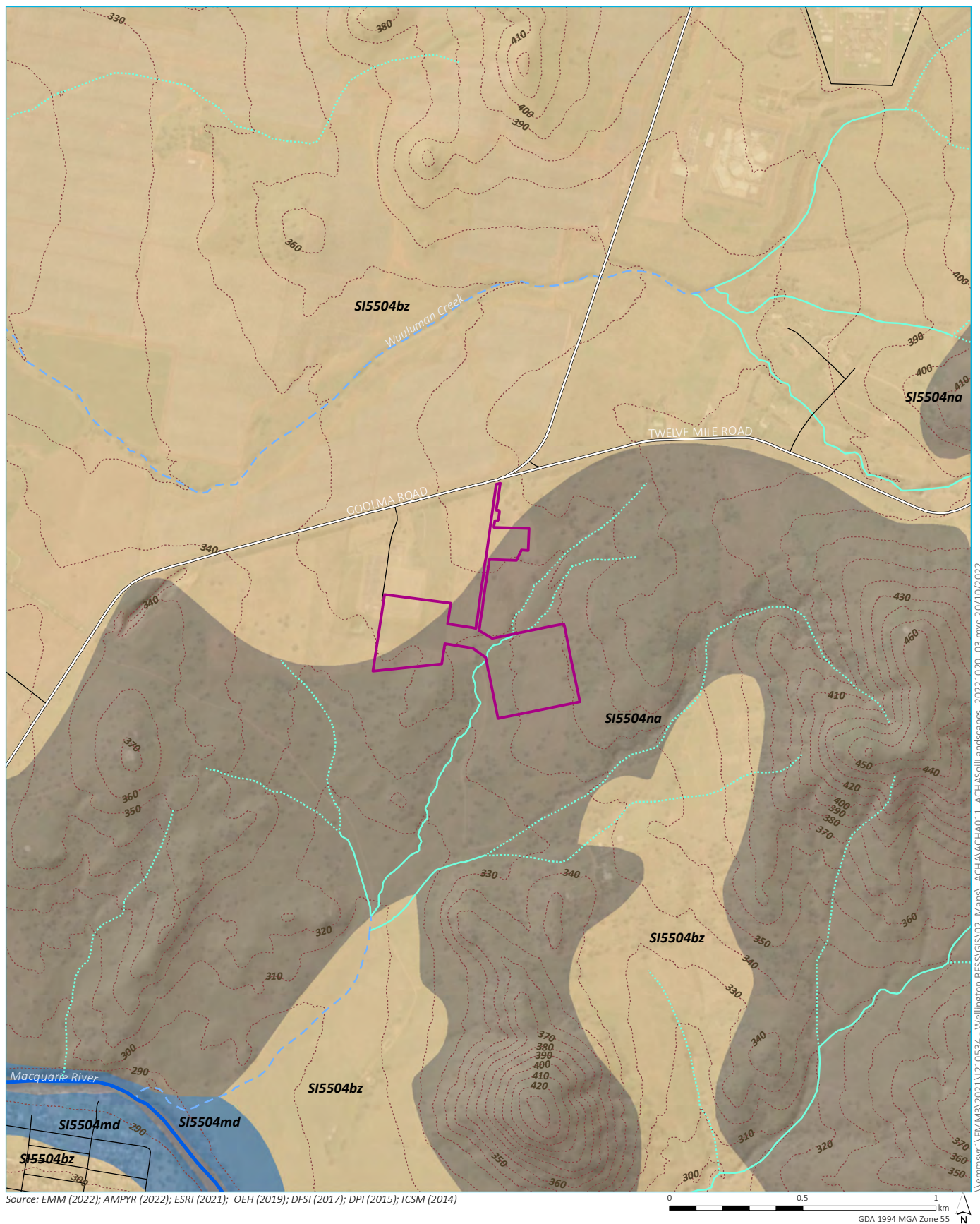
- Development boundary
- Major road
- Minor road
- Topographic contour (10 m)
- Waterbody
- Strahler stream order
- 1st order
- 2nd order
- 3rd order
- 9th order

- Geology (100K)
- Fold axis, position accurate
- Quaternary
- Qa | Cainozoic Units
- Devonian - Grega Group
- Dgc | Cuga Burga Volcanics

- Silurian - Mumbil Group
- Smb | Barnby Hills Shale
- Smda | Warderie Volcanic Member
- Smdw | Wylinga Member
- Smq | Narragall Limestone
- Ordovician - Cabonne Group
- Oco | Oakdale Formation

Geology

Wellington Battery Energy Storage System
Aboriginal cultural heritage assessment
Figure 3.2



KEY

- Development boundary
- Major road
- Minor road
- Topographic contour (10 m)

- Strahler stream order
- 1st order
 - 2nd order
 - 3rd order
 - 9th order

- Soil landscape
- SI5504bz | Bodangora
 - SI5504md | Macquarie-dubbo
 - SI5504na | Nanima

Soil landscapes

Wellington Battery Energy Storage System
Aboriginal cultural heritage assessment
Figure 3.3

4 Ethno-historical context

4.1 Key findings

- Aboriginal people of the project area spoke the Wiradjuri language, whose territory represented the largest of all the Aboriginal groups recorded in NSW. Wiradjuri Country extends from Dubbo south to Albury, and Ivanhoe east to the Blue Mountains. *Binjang* ('the beautiful valley') is the Wiradjuri name for the Wellington Valley.
- Wellington was a focal point of post-contact activity in the early 1800s, and is notable as the site of one of the first Aboriginal mission sites in NSW. Three missions – some operating concurrently – were established at Wellington, several kilometres south of the project area. One post-contact Aboriginal camp, known as the Black's Camp and located ~3 km south of the project area, is also listed on the State Heritage Register.
- However, while historical information provides several observations in relation to the early nineteenth century Aboriginal society, in particular at nearby Wellington and along the Wambuul-Macquarie River, no site-specific areas of activity were identified. No intangible values for the project area have been identified to date, but the Wellington Valley Wiradjuri Aboriginal Corporation indicated increasing development in the region is having a cumulative impact on the cultural landscape.

4.2 Ethno-historical sources

Information about the socio-cultural structure of Aboriginal society prior to European contact largely comes from ethno-historical accounts made by colonial settlers. These accounts and observations were often made after significant social disruption due to disease and displacement. As a result, this information is often contentious, particularly in relation to language group boundaries. Therefore, it is likely that language group boundaries were far more diffuse than the arbitrary demarcations drawn by colonial observers.

The project area is on Wiradjuri land (Plate 4.1). Tindale (1974) describes the land of the Wiradjuri as extending from Dubbo south to Albury, and Ivanhoe east to the Blue Mountains. The Australian Institute of Aboriginal and Torres Strait Islander Studies (1996) marks the northernmost boundary as Nyngan. It is important to remember that these groupings represent an account of Aboriginal groups post contact, they may not necessarily present an accurate picture of the way lands were occupied or used in the past.

The area was known as "the land of the three rivers", after the *Wambuul* (later named the Macquarie River, now dual named the Wambuul-Macquarie River), the *Kalare* (later named the Lachlan River), and the *Murrumbidgee* (later named the Murrumbidgee River) (Perkins and Langton 2010, p. 32; Heritage Office (HO) and Department of Urban Affairs and Planning (DUAP) 1996). Tindale (1974, p. 201) quotes Alfred William Howitt as mentioning several of these local groups of the tribe: *Narrandera* (prickly lizard), *Cootamundra* (kuta-mundra, from the kutamun turtle), and *Murranbulla* (maring-bula, two bark canoes). *Binjang* ('the beautiful valley') is the Wiradjuri name for the Wellington Valley. There is some reference to the Wirrum Wirrum people of the Binjang clan within the Wiradjuri Nation occupying the confluence of the Wambuul-Macquarie and Bell's Rivers (and, by proximity, likely the project area).



Plate 4.1 Left: detail from Tindale's map (1974) showing the location of the *Ngunawal*. Right: Detail from the AIATSIS map of Indigenous Australia. The general location of Wellington is circled in blue.

For the Wiradjuri people, the three rivers were their livelihood and supplied a variety of consistent and abundant food provisions including shellfish and fish such as Murray cod (HO and DUAP 1996). In dry seasons the food from the rivers was supplemented with kangaroos and emus hunted for their meat, as well as fresh food gathered from the land between the rivers, including fruit, nuts, yam daisies, wattle seeds and orchid tubers (HO and DUAP 1996). The Wiradjuri people would travel south in December and January each year to the Bogong Mountains and Snowy Mountains, where men took part in feasts of roasted bogong moths that took place high on the rocky granite outcrops of the mountains (NSW NPWS 2003). Moths were a summer staple for all those Aboriginal people whose territories included major moth aestivation sites, namely the *Walgalu* of the upper Tumut, the *Ngarigo* of Monaro, the *Djilamatang* of the upper Murray, the *Jaimathang* of Omeo, and the *Minjambuta* of Mount Buffalo (Flood 1973, p. 118). The feasts incited the migration of groups and coincided with important ceremonial and intermingling of Aboriginal tribes in the region.

Carved trees have been recorded in many places in NSW, but are most concentrated along the Upper Bogan and Wambuu-Macquarie Rivers (White 1986, p. 70–1, cited in Griffin 2004). Etheridge (1918, p.56, cited in Griffin 2004) indicates that there is a distinction in the motifs carved, with zig-zag patterns found in the Upper Macquarie and curved line motif predominant in the middle Macquarie. A number of commentaries remark on the similarity of designs used on carved burial trees, possum skin cloaks, shields and clubs (White 1986, p. 83, cited in Griffin 2004). Griffin (2004, p. 3–8) these markings would represent and reinforce social groupings and distinctions. The carving of trees to mark a burial site was still practiced in 1850, as seen in the case of Yuranigh's grave, located south of Wellington near Molong (NSW NPWS 1999). Yuranigh, a Wiradjuri man, and two other Aboriginal people accompanied Thomas Mitchell on his final expedition to Queensland in 1845–1846. The grave site features the grave of Yuranigh, complete with marble headstone and concrete slab (a replica of the sandstone slab commissioned by Mitchell in 1852), the grave of an unknown Aboriginal, and four carved trees.

The Wiradjuri people maintained a cycle of ceremonies that moved in a ring around the whole tribal area, tended to assist tribal coherence despite the vast occupied area (Tindale 1974, p. 201). Initiation ceremonies, a large ceremony called a *Būrbūng*, were an important time for young men of the Wiradjuri people. Mathews (1896) describes a *Būrbūng* undertaken by the “headman of the Macquarie tribe, ‘Big Jimmy’” at Bulgeraga Creek (>250 km north west of the project area. This particular ceremony was conducted over months between May and July, and tribes from five rivers: the Macquarie, the Castlereagh, the Bogan, the Barwan, and the tribe from Cobar. Given the advance rate of European colonisation by the late 1890s, and the widespread devastation Aboriginal communities had suffered from disease and conflict, this speaks to the perseverance and endurance of these Aboriginal communities, some reporting to have travelled almost 200 km for the event.

Mathews (1898, p. 297–298) recounts the Dreaming story of the origin of the *Būrbūng* as told to him by a cleverman (*wooringimba*), and is summarised as follows. Dhuramoolan, a spirit with a voice of “rumbling of distant thunder” who served the creator god Baiame, would take boys from the tribe and instruct them in the laws and traditions of the community, so they might become initiated. When they returned the community, all the boys would be missing one of their upper incisor teeth (as a visible sign of initiation). Dhuramoolan pretended to Baiame that he “killed the boys, cut them up, and burnt them to ashes, that then he formed the ashes into human shape, and restored them to life, new beings...”. After initiation, it was found that some of did not return, and Dhuramoolan always reported that they had died from disease. After a time, Baiame grew concerned at the loss of so many young men, and suspecting that something was wrong, he questioned those brought back, but they were too much afraid of Dhuramoolan. On Baiame compelling them to speak the truth, they told him that Dhuramoolan had feasted on their fellows. They also stated Dhuramoolan had lied about killing then restoring them to life. They told Baiame the extraction of their teeth was performed by Dhuramoolan inserting lower incisors under the tooth to be extracted, and wrenching it out, but sometimes bit the entire face off the boy and devoured him. Upon hearing this, Baiame became very angry and destroyed Dhuramoolan, but put his voice into all the trees of the forest and told it to remain in these trees for ever. He then split one of the trees, and made a bullroarer (*mudthega*) which he fastened to a string and swung round, and it had Dhuramoolan's voice. Baiame then instructed the chiefs to initiate the youths of the tribes, using the *mudthega* to represent the voice of Dhuramoolan to which they had all been accustomed. He then instituted the ceremonies of the *Būrbūng* as it is at present practised, and commanded them to teach it to their sons in order that it might be perpetuated among all the tribes.

Similarly, Henderson (1832, p. 145–6, cited in Griffin 2004, p. 3–11) describes and illustrates a large and elaborate *Būrbūng* ground on the banks of the Wambuul-Macquarie River at Wellington:

A long straight avenue of trees, extended for about a mile, and these were carved on each side, with various devices ... at one extremity of this, the earth had been heaped up, as to resemble the gigantic figure of a human being ... a variety of other characters were observed to be rudely imprinted upon the turf ... a narrow pathway goes towards the left, and soon terminated in a circle, which is closed by a wall, composed merely of loose earth.

While no material evidence was relocated when the site was surveyed in the 1970s, the site is represented by NPWS 36-4-6 (possibly now AHIMS 36-4-[000?]6) though this site was not captured within the radius of the search conducted for this study (see Section 5.4), so is presumably a fair distance from the project area.

4.3 Contact and post contact period

4.3.1 Overview

The expedition led by explorer John Oxley was the first European to encounter the Wellington Valley, on 19 August 1817. His description of the landscape is as follows (Oxley 1820):

A mile and a half brought us into the valley which we had seen on our first descending into the glen: imagination cannot fancy anything more beautifully picturesque than the scene which burst upon us. The breadth of the valley to the base of the opposite gently rising hills was, between three and four miles, studded with fine trees, upon a soil which for richness can nowhere be excelled; its extent north and south we could not see: to the west it was bounded by the lofty rocky ranges by which we had entered it; this was covered to the summit with cypresses and acacia in full bloom: a few trees of the *sterculia heterophylla*, with their bright green foliage, gave additional beauty to the scene. In the centre of this charming valley ran a strong and beautiful stream [Bell's River], its bright transparent waters dashing over a gravelly bottom, intermingled with large stones, forming at short intervals considerable pools, in which the rays of the sun were reflected with a brilliancy equal to that of the most polished mirror...I proceeded down the stream, and had scarcely rode a mile when I was no less astonished than delighted to find that it joined a very fine river, coming from the east-south-east from among the chain of low grassy hills, bounding the east side of the valley in which we were...Different in every respect from the Lachlan, it here formed a river equal to the Hawkesbury at Windsor, and in many parts as wide as the Nepean at Emu Plains. These noble streams were connected by rapids running over a rocky and pebbly bottom, but not fordable, much resembling the reaches and falls at the crossing place at Emuford, only deeper: the water was bright, and transparent, and we were fortunate enough to see it at a period when it was neither swelled beyond its proper dimensions by mountain floods, nor contracted by summer droughts.

By the 1820s, pastoralists were already making their mark on the landscape and in 1823, Lieutenant Percy Simpson was appointed by the colonial government to establish a convict station at the junction of the Bell and Wambuul-Macquarie Rivers (see Section 4.3.1). Augustus Earle (1793–1839), a celebrated British painter, visited Wellington, likely in the late 1820s, and produced a number of illustrations and paintings of the area and its people, including a portrait of an unnamed Aboriginal person (Plate 4.2).

Clashes between the new European settlers and the local Aboriginal people were common around the Murrumbidgee and even further north, particularly at Bathurst (southeast of Wellington) during what has been named the 'Bathurst War' in 1824, led by Wiradjuri man Windradyne. After a protracted period of guerrilla warfare, the conflict culminated in a conflict at a station on the Cudgegong River, which left multiple Wiradjuri dead. These events resulted in martial law being declared, which stamped out most resistance in the region. Simpson, the Lieutenant of the convict station at Wellington (discussed below), was at Wellington Valley during this period and claimed the local Wiradjuri were not involved: 'they seem quite harmless and certainly not savage or warlike as I was informed at Bathurst, but quite inoffensive and are very familiar' (1 March 1823, cited in Roberts 2000 p. 36). Indeed, Roberts (2000, cited in Griffin 2004) claims European relations with the Wellington Wiradjuri community was relatively amicable, owing to the small size of the settlement.

Settlers' concerns about the dangers of the Aboriginal people subsided during the 1840s as did the independence of the Wiradjuri people. By the 1850s, although corroborees were still being held on the hills surrounding Mudgee (such an example detailed by Mathews above, north of Dubbo), the culture of the local Aborigines had been vitiated by disease, alcohol and mass European influx during gold rush periods (HO and DUAP 1996).

4.3.2 *Maynggu Ganai* Historic Site and Black's Camp

Wellington Valley was the site of some of the first missions in NSW. Several missions operated at the site in the 1830s and 1840s, largely owing to internal strife between the various ministers who operated there. Three missions appear to have operated – at some points, concurrently – in Wellington: Wellington Valley Aboriginal Mission (1832–43; also known as *Maynggu Ganai* Historic Site), Blake's Fall Mission (1832–?1840s; also known as Black's Fall Mission), and Apsley Mission (c.1839–?1840s) (Allen n.d.; Heritage NSW 2005, 2010). There is some uncertainty on whether Blake's Fall Mission and Apsley Mission are two separate sites, or a continuation; secondary sources differ (cf. Heritage NSW 2010; Allen n.d.). For Aboriginal people, these missions are a painful reminder of displacement, abuse, and neglect that often occurred at missions across NSW. Two of these missions are associated with State Heritage Register items and discussed further below.

Meaning 'people's land', the *Maynggu Ganai* Historic Site is of national, State and local significance to the Wellington Aboriginal community, and is located ~3 km south of the project area (Griffin nrm Pty Ltd 2004; Heritage NSW 2005). In 1823, it was the site of a Convict Station built by Percy Simpson. The site was taken over in 1832 by Reverend William Watson of the Anglican Church Missionary Society as a mission to the Wiradjuri, named Wellington Valley Aboriginal Mission, which operated until 1842/1843. It was the first mission for Aboriginal people in NSW. From 1845, the settlement was abandoned and the focus of development became the present town of Wellington, which was proclaimed in 1846 (Griffin nrm Pty Ltd 2004). The site is listed on the National State Heritage Register (SHR 01859) and the Wellington Local Environmental Plan (LEP) (Instrument No I96) (Heritage NSW 2005).

Similarly, the Black's Camp (AHIMS 36-4-0128) is a post-contact Aboriginal camping site, associated with Blake's Fall Mission (HeritageNSW 2010). It is not clear if this was a traditional camping site in the pre-European period, but there is evidence the site was occupied during the operation period of the mission and up until the early 20th century (possibly even up until the 1940s). Archaeologically, the site is reported to retain remnants of huts, a scarred tree, and a shell midden.

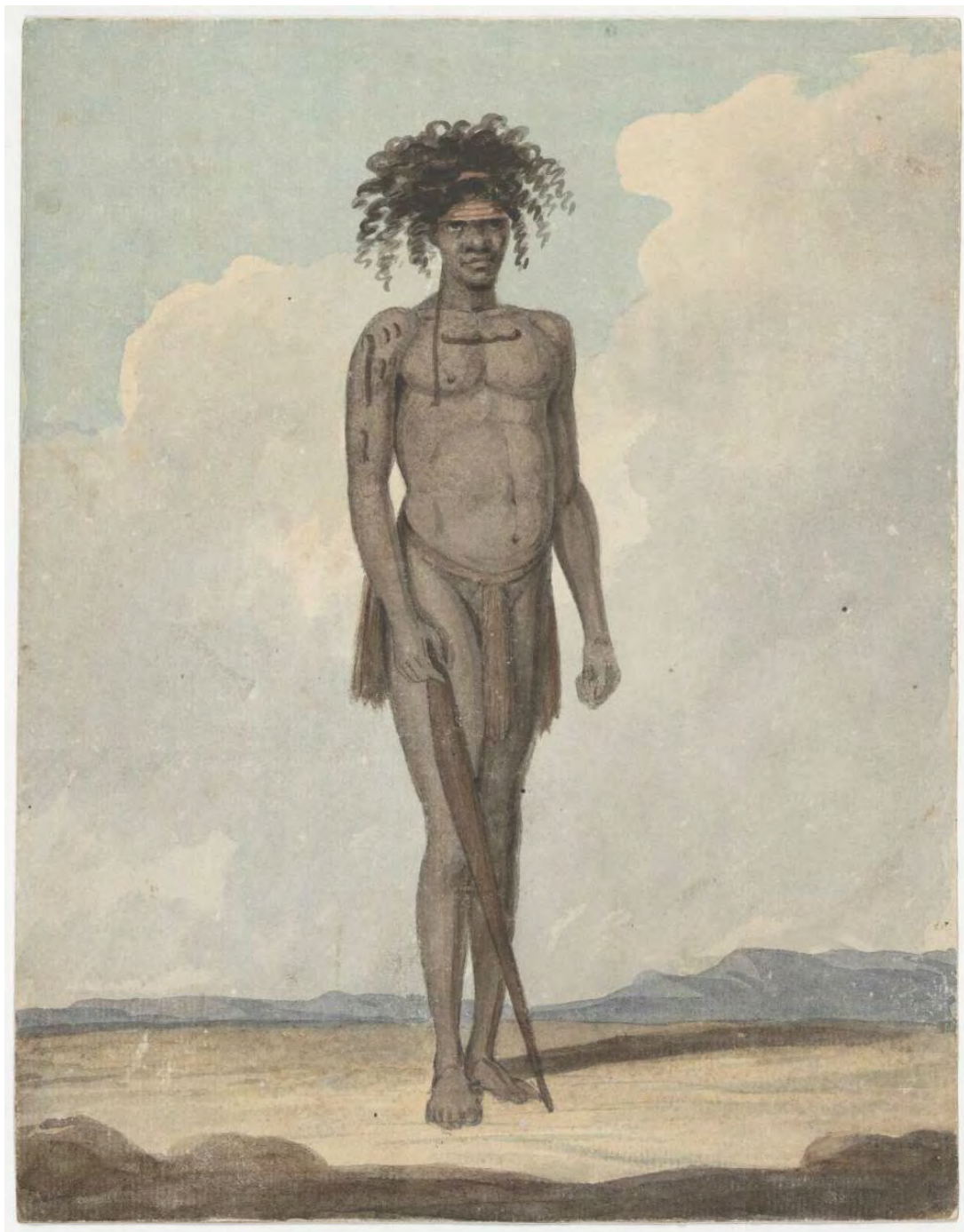


Plate 4.2 Native of New South Wales from Wellington Valley, c. Augustus Earle, National Library of Australia.

4.4 Information provided by RAPs

The following comments were received during comment period for the draft ACHA:

- Wellington Valley Wiradjuri Aboriginal Corporation (WVWAC) advise that the project area was used ephemerally as a movement corridor between Wuuluuman Creek and the Wambuul-Macquarie River; and retained some aesthetic appeal. From a cultural perspective, WVWAC assert that the broader landscape has moderate cultural value.

5 Archaeological context

5.1 Key findings

- Previous studies of the region are sparse, and primarily constrained to cultural heritage management studies for various residential and/or industrial activities. These studies all suggest generally sporadic and/or ephemeral past use of the region, with a focus of occupation and visitation on major waterways such as the Wambuul-Macquarie River and Bell's River.
- A review of Heritage NSW's AHIMS database identified 55 previously documented sites in the broader landscape around the project area. These were similarly dominated by sites of varying densities of stone artefacts (78%), but also included rarer site types such as rockshelters, grinding grooves, post-contact habitation sites, ceremonial sites, and culturally modified trees.
- Two sites are within/within proximity to the project area. One (AHIMS 36-4-0201) is noted as 'not a site' and can be considered non-extant for the purposes of this study. The recorded location of the other, AHIMS 36-4-0203, is likely in error. No other sites are documented within the project area.
- Since 2010, 15 Aboriginal Heritage Impact Permits (AHIPs) have been issued in the Dubbo Regional LGA. None encompass the project area.
- Based on the regional information and characteristics of the project footprint, it is unlikely that substantial cultural materials are present within the project area as it lacks the natural and topological features associated with long term occupation. Based on regional modelling, sites expected in the project area where disturbance has not resulted in their loss are: isolated artefacts and/or low density artefact scatters associated with low order drainage lines; and, to a lesser extent considering historic revegetation, culturally modified trees.

5.2 Peopling of the continent

The first peopling of Australia occurred approximately 50,000 years ago (50 ka) and likely consisted of reasonably large groups of technologically advanced hunter-gatherers (Bradshaw et al. 2019; O'Connell et al. 2018). The peopling of the continent was rapid, with sites such as Devil's Lair (WA), Warratyi (SA), and Lake Mungo (NSW) all occupied within a few thousand years of arrival (Bowler et al. 2003; Hamm et al. 2016; Turney et al. 2001). Genomic research has shown that following these initial explorations of the continent, regional populations or nomadic sedentism, was established by ~40 ka (Tobler et al. 2017). These small populations were highly mobile, but remained within a broad spatial geographic area, dictated in general by the nature of resources and water availability. In the case of some of the arid parts of the continent, mobility encompassed thousands of square kms (Gould 1977), while major riverine corridors such as the Murray River had near permanent settlements (Pardoe 1995).

In NSW, the earliest evidence of Aboriginal people are human remains recovered from the lunette in Lake Mungo and dating to ~42 ka (Bowler et al. 2003; O'Connell et al. 2018). The presence of red ochre covering the remains represents a society with significant cultural and symbolic complexity (Langley et al 2011). Near the coastal edge, the earliest populations were found at Cranebrook Terrace, near Penrith (western Sydney). Here a handful of rudimentary stone tools were found in an alluvial unit, some 8 m below the current surface, and which were dated to ~40–45 ka (Williams et al. 2017).

However, it is not until ~35 ka, that regional populations appear to have become established in the Sydney Basin, and which appeared to consist of small bands of people focussed mainly along major river systems, including the Hawkesbury-Nepean River, Georges River, and Hunter River (AAJV 2020; Hughes et al. 2014; Williams et al. 2012; 2014). These rivers formed key ecological refuges that hunter-gatherer groups used to survive major climatic events such as the Last Glacial Maximum (21±3 ka) – a cool and arid climatic period. Well-established archaeological models suggest populations experienced a major reduction in size (by as much as 60%), and settlement contraction and abandonment across much of the continent during this time (Veth 1993; Williams et al. 2013), although recent research suggests that the story may be more complex than this (eg Tobler et al. 2017).

The terminal Pleistocene and early Holocene (~18–8 ka) was characterised by significant environmental change, notably the rapid inundation of much of the coastal shelf, resulting in the reduction of the continent by ~21% (~2 million km²) (Williams et al. 2018), in tandem with improving climatic conditions – the Holocene climatic optimum (Williams et al. 2015a; 2015b). More broadly, these conditions resulted in increasing population growth, expansion of ranging territories, increasing sedentism (longer patch residence time) and the beginnings of low-level food production (eg aquaculture), and ultimately the initiation of social and cultural groupings observed in the late Holocene (Williams et al. 2015b). We see a much broader range of archaeological site types occurring, such as the Roonka Flat burial ground on the banks of the Murray River within which some 147 individuals were interred through the Holocene (Pate et al. 1998), and the increasing use of marine resources. Many of the previous refuges were subject to abandonment or a re-structuring of land use (Dortch 1979; Fitzsimmons et al. 2019). These activities suggest the ability to undertake large-scale movements to mitigate environmental distress was becoming increasingly difficult and was addressed through diversification of hunter-gathering behaviours and, at least in part, technological advances, and investment (Williams et al. 2015b).

The late Holocene saw significant population increase, with hunter-gatherers reaching their zenith of ~1.2 million at 0.5 ka, a tenfold increase on Pleistocene levels (Williams 2013). Data suggests that the highest populations during this time were in the south-east of Australia. Williams et al. (2015b) suggest that this increase was likely a result of intensification of earlier technological advancements, including hafting-technology, plant and seed processing, and localized landscape management (using fire), allowing climatic downturns to be successfully weathered. These included strong arid El Nino Southern Oscillation (ENSO) conditions between 4–2 ka, and increasingly turbulent climatic conditions during the Medieval Climatic Anomaly (1.3–1 ka) (generally wetter) and Little Ice Age (0.3–0.5 ka) (generally drier) (Williams et al. 2010; 2015b). A result of these denser populations was the decreased freedom of movement and the formation of strong classificatory kinship systems, complex cultural and symbolic landscapes based on geographic totemism (the ‘Dreaming’), distinctive graphic art systems, land rights in the form of ritual property, and formalized exchange networks (Williams et al. 2015b).

5.3 Local context

Below is a synthesis of a number of nearby studies that more accurately reflect the likely cultural materials within the project area. The locations of some of these studies in relation to the project area is shown in Figure 5.1; reports for some of the studies shown on the figure were not available at the time of writing.

Study:	Wollar to Wellington Electricity Transmission Line
Reference:	OzArk (2005)
Distance from project area:	>117 km north east

This ACHA and associated survey, was undertaken in advance of works relating to the proposed construction of the electrical transmission line from Wollar to Wellington, located adjacent east to the project area. The development was defined as a Major Project (Critical Infrastructure) under the former Part 3A of the EP&A Act.

A linear project set within the South Western Slopes bioregion, the proposed transmission line passed through an undulating landscape with vast creek flats. The environmental and archaeological background research determined whether the topography, geology, disturbance and flora present would have provided a suitable locale for Aboriginal occupation, both transient and/or more long term. Areas near watercourses, mature native trees and sandstone outcrops were predicted to be focal points of past activity along the proposed corridor. Localised disturbance was considered to have impacted the area in various forms, including through agricultural activities, gully and/or sheet erosion and the construction of sealed and unsealed roads.

The survey undertaken for the assessment resulted in the identification of 28 sites, including 19 artefact scatters and nine potential archaeological deposits (PADs). A number of raw materials were identified, including quartz, quartzite, chert, rhyolite, volcanic stone, mudstone, tuff and silcrete. In addition, seven isolated finds were recorded along with two PADs with no surface manifestations. Most sites were recorded in open areas or along creek banks, with varying levels of surface visibility due to long grasses and erosion. Based on the transmission alignment, 17 of the recorded sites would either be directly impacted by works or required mitigative measures. These sites were given one of four recommendations, including being fenced off (n=6), test excavated (n=6), monitoring (n=3) or collection/relocation (n=2).

Study:	Wellington Gas Pipeline and Power Station
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Reference:	AMBS (2008)
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Distance from project area:	Adjacent west
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This ACHA and associated survey, was undertaken in advance of works relating to the proposed construction of the Alectown to Wellington Pipeline and Wellington Power Station. The northern most extent is located adjacent south west to the project area, and includes some of the project area south of the substation. The development was defined as a Major Project (Critical Infrastructure) under the former Part 3A the EP&A Act.

Set within the western fall of the Great Dividing Range, the proposed pipeline passed through the fertile river flats of the Wellington-Parkes district. The environmental and archaeological background research determined the topography, geology, hydrology, land disturbances and flora present would have provided a suitable locale for Aboriginal occupation, both transient and/or more long term. Open ground exposures and sensitive landforms (ie large trees) were predicted to be focal points of past activity along the proposed corridor. Localised disturbance was considered to have highly impacted the area in various forms, including through agricultural activities, mining and gully and/or sheet erosion.

The survey undertaken for the assessment resulted in the identification of four sites along the proposed pipeline, including three low-density artefact scatters and one culturally modified tree. A number of raw materials were identified, including chert, silcrete and quartz. All identified artefacts were flakes, with only one exhibiting retouch. All sites were recorded in open areas, with varying levels of surface visibility due to long grasses and dirt tracks.

Due to the high levels of disturbance and low significance of some sites, two sites were destroyed as a result of the proposed works, and the project was redesigned to avoid two, including a buffer around one culturally modified tree.

Study:	Young to Wellington Gas Pipeline
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Reference:	CNC Project Management (2010)
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Distance from project area:	Adjacent south
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This ACHA and associated survey, was undertaken in advance of works relating to the proposed construction of the Young to Wellington Pipeline, the northern most extent located adjacent south to the project area. The development was defined as a Major Project (Critical Infrastructure) under the former Part 3A of the EP&A Act.

Set within the variable landscape of the Murray-Darling Basin, the proposed pipeline passed through three low ranges crossing a mix of slope and alluvial ecosystems. The environmental and archaeological background research determined whether the topography, geology, ecosystems, climate, land disturbances, flora and fauna present would have provided a suitable locale for Aboriginal occupation, both transient and/or more long term. Areas with level ground above valley floors with access to water were predicted to be focal points of activity along the proposed corridor, with three intensive occupation areas identified pre survey (Wellington, Molong and Cowra). Localised disturbance was considered to have impacted the area in various forms mainly through historic and current agricultural activities.

The survey undertaken for the assessment resulted in the identification of 18 sites. The survey identified five stone artefact concentrations, with flakes, flaked pieces, cores hammerstones, grinding pieces and scraper recorded. Isolated artefacts were noted in the report but were not formally recorded outside of artefact scatters. A number of raw materials were identified, including quartz, siliceous volcanic stone and basalt. Thirteen culturally modified trees were recorded during the survey. In addition, one potential culturally modified tree was identified within the survey boundary along with four that were identified outside of the alignment near the Wellington Power Station. All sites were recorded in open areas, with varying levels of surface visibility due to seasonal rain and high grasses in crop fields.

Study:	Wellington Solar Farm
Reference:	NGH (2018)
Distance from project area:	Adjacent north

This ACHA, and associated survey, was undertaken in the advance of works relating to the Wellington Solar Farm, located on the northern side of Goolma Road, adjacent north to the project area; it also includes some of the project area north of the substation. The development was defined as a State Significant Development (SSD 8895) under Part 4, Division 4.7 of the EP&A Act.

Set within an undulating landscape of cleared alluvial plains and low slopes, bisected by Wuuluman Creek (3rd order) and associated tributaries, the environmental and archaeological background research determined the topography, geology, flora and fauna present would have provided a suitable locale for Aboriginal occupation, both transient and/or more long term. Wuuluman Creek was predicted to be a focal point of activity relative to the typography of the project area, however more intensive occupation on a regional scale was likely to have been closer to the Wambuul-Macquarie River as a more substantial and permanent watercourse.

The survey undertaken for the assessment resulted in the identification of 26 sites, though visibility was generally poor outside areas that had not been recently ploughed. The survey identified 15 isolated finds, ten artefact scatters, one scarred tree, and one potential hearth. The identification of the hearth feature was considered tentative at the time of reporting, and no hearth feature is recorded within the Wellington Solar Farm boundary on AHIMS; therefore, it is likely that further assessment of this site determined it a natural feature. Artefacts recorded during the assessment were manufactured primarily from quartz and volcanic material common to the area. A high number of artefacts exhibited riverine cortex, suggesting procurement from the nearby Wambuul-Macquarie River or other substantial waterways nearby. Lesser numbers of exotic materials, such as silcrete, sandstone and fine-grained siliceous, were also identified.

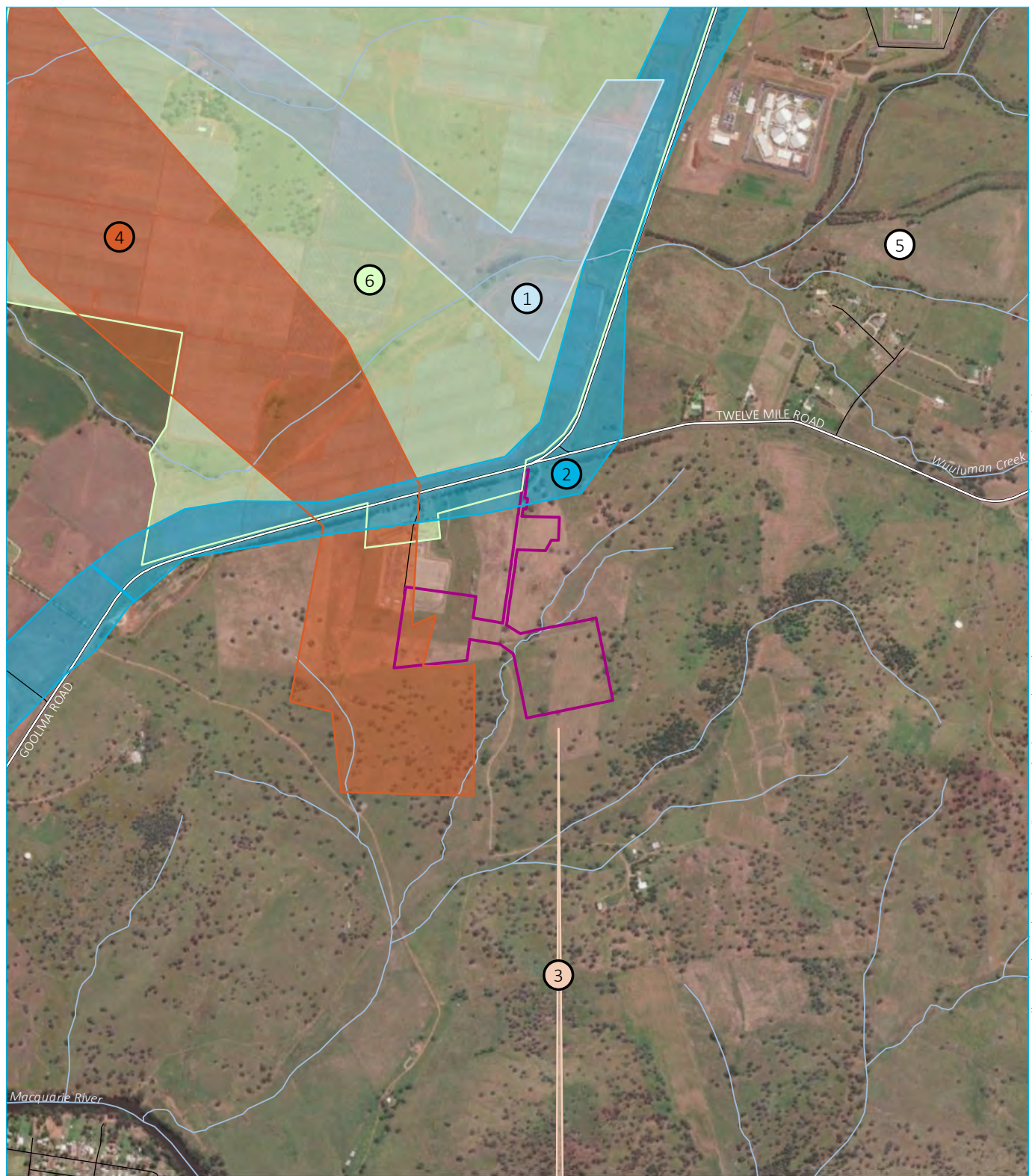
Regarding site distribution across the landscape, the report is generally inconclusive regarding past use of different landforms. All sites identified during the survey were located within 500 m of water. Notably 40% (n=26) of recorded artefacts were located within 100 m of Wuuluman Creek. Artefact scatters were typically located on elevated flats near water. Overall, the sites identified in this assessment are in close proximity to either permanent or ephemeral water sources, were determined to be representative of the opportunistic use and movement of people through the landscape. It is considered unlikely the locale was used for long-term occupation, given the more plentiful resources closer to the Wambuul-Macquarie River.

Study:	Dubbo LGA Indigenous Heritage Project
Reference:	OzArk (2020)
Distance from project area:	Encompasses project area

This Aboriginal Heritage Study was developed for the Dubbo Regional Council to inform future management of Aboriginal cultural heritage within the existing relevant NSW and Commonwealth Statutory frameworks. The aim of the study was to identify places of significance, record those places, and develop recommendations for their management and conservation, to assist Council to develop strategies to manage Aboriginal sites and develop protocol for ongoing Aboriginal community engagement. The study was undertaken to inform Council's updated Local Environmental Plan (LEP).

Set within the central west slopes of the Dubbo region, the proposed developments pass through an undulating landscape with vast floodplains. The environmental and archaeological background research determined whether the topography, geology, climate, disturbance, flora and fauna present would have provided a suitable locale for Aboriginal occupation, both transient and/or more long term. Open areas and mature native trees were predicted to be focal points of past activity along the proposed corridor. Localised disturbance was considered to have impacted the area in various forms, including through agricultural activities, vegetation clearing and the construction of sealed and unsealed roads. These factors heavily impacted the overall survey visibility.

The survey undertaken for the assessment resulted in the identification of 26 sites, including 11 artefact scatters (open site), seven culturally modified trees and eight isolated finds. As a result of the field investigation, eight of the 12 previously recorded sites were relocated, giving an overall total of 34 sites. A number of raw materials were identified, including hornfels, quartz, indurated tuff, quartzite, sandstone, rhyolite, silcrete, mudstone and chert. Most sites were recorded in open areas or along terraced areas, with varying levels of surface visibility due to long grasses and agricultural activities.



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KEY

- Development boundary
- Minor road
- Major road
- Watercourse/drainage line

ARCHAEOLOGICAL SURVEY REPORT

- 1 | An archaeological survey of the reconstructed route of two proposed ELCOM transmission lines 94F 94J, Wellington to Dubbo (ERMS, 1985)
- 2 | National report: Warren Bluff surveys (ERMS, 1988)
- 3 | ERM Power Pty Ltd - Young to Wellington Gas Pipeline (OzArk, 2008)
- 4 | Wellington Gas Pipeline, Power Station & Compressor Station Heritage Assessment [for Parson Brinckerhoff] prepared by Australian Museum Business Services (AMBS, 2008)
- 5 | Ecological Overview & Heritage Assessment: Tower 181-190 and 234-241: Wollar-Wellington 330kV Electricity Transmission Line [report OzArk for Internationa Environmental Consultants P/L on behalf of TransGrid] by OzArk (ERM, 2010) (occupies full view extent)
- 6 | Wellington Solar Farm Aboriginal Cultural Heritage Assessment (NGH Environmental, 2018)

Previous studies in the local area

Wellington Battery Energy Storage System
Aboriginal cultural heritage assessment
Figure 5.1

5.4 AHIMS data

The Aboriginal Heritage Information Management System (AHIMS) database is managed by Heritage NSW and includes a location and description of Aboriginal objects and sites recorded through academic research and cultural heritage management (see Appendix D.1 for further explanation of Aboriginal site features). EMM conducted a search of the AHIMS register on 2 August 2021 (ID: 609448). The search covered an area of ~170 km². The search identifies any Aboriginal sites or places registered within the project area; and aids predictions for the project area showing the frequency and distribution of Aboriginal site types in the broader landscape. A copy of the AHIMS search is provided in Appendix D.2.

The AHIMS search identified 55 sites which are categorised in Table 5.1. Of these sites, 20 have been destroyed (AHIMS 36-4-0138; 36-4-0149; 36-4-0136; 36-4-0135; 36-4-0158; 36-4-0210; 36-4-0147; 36-4-0153; 36-4-0146; 36-4-0159; 36-4-0148; 36-4-0156; 36-4-0150; 36-4-0141; 36-4-0143; 36-4-0214; 36-4-0211; 36-4-0212; 36-4-0140; and 36-4-0213) and one has been reassessed as not a site (AHIMS 36-4-0201). The remaining 34 sites are valid (ie they have not been destroyed). The information and location of two sites (AHIMS 36-5-0222 and 36-4-0081) within the search area are restricted, however communication with Heritage NSW has confirmed these sites will not be impacted by the proposed works (pers. comm. 4 July 2020; Appendix D.2).

Very few site types are represented in the local region, with only five classifications documented (refer Table 5.1). The majority of sites in the search area are artefact sites (including scatters and isolated finds; n=43, 78%), followed by scarred trees (n=6, 11%). While nearly a quarter of the artefact sites had unspecified artefact numbers (n=24, 24%), of the remainder, most were isolated finds (n=35, 34%) or very low-density scatters where 10 or less were documented (n=22, 22%). For regional comparison, NGH reported ten artefact scatters within the Wellington Solar Farm project area; of these, five sites recorded two artefacts, and the other sites reported low or low-to-moderate densities (<12 artefacts). These artefacts were recorded over relatively large exposures, ranging from 30 m to 100 m in length, and which would align with densities of <2 artefacts/m² as appears more common for the region. Other site types recorded in the region include six culturally modified trees (n=6, 11%), two potential archaeological deposits (PADs; n=2, 4%), and one bora/ceremonial site with an associated carved tree (n=1, 2%). In addition, one burial site has been recorded ~3 km south west of the project area within a nature reserve. No other burial sites are recorded. Two sites (AHIMS 36-4-0074 and 36-4-0219) do not specify a site type. AHIMS 36-4-0219 appears to be an artefact reburial location associated with Wellington Solar Farm.

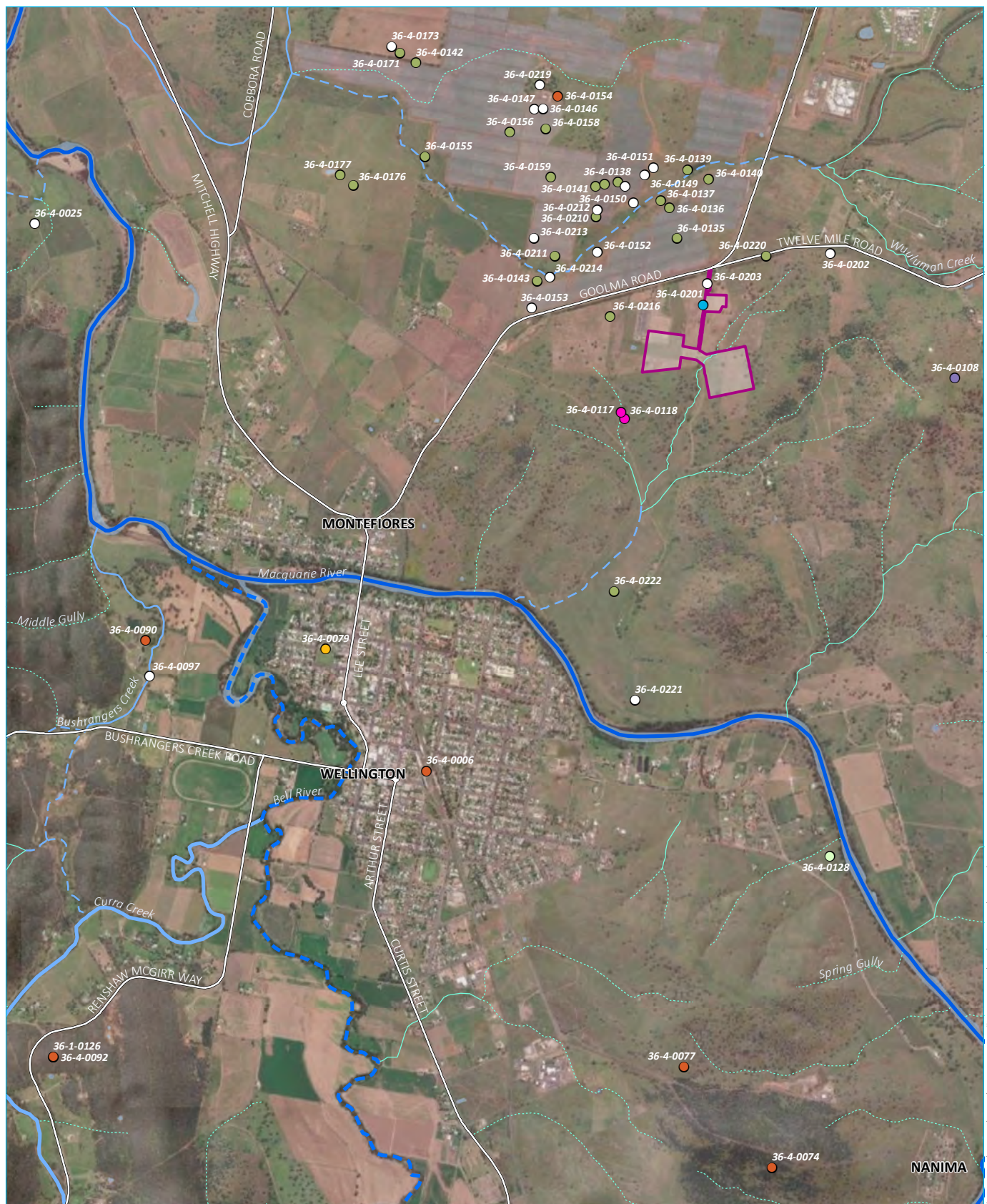
One site (AHIMS 36-4-0203) has been previously identified within the project area, and one site (AHIMS 36-4-0201) has been recorded in the adjacent lot, but within 5 m of the western boundary of the project area. Site cards for these sites are provided in Appendix D.3. Notably, AHIMS 36-4-0201, originally identified as a red-brown tuff flake (68 mm x 45 mm x 17 mm), has been subsequently identified as “not a site” on AHIMS. Some effort was given to relocating this site (or any possible associated artefacts) within the project area, with no success. Therefore, this site can be considered non-extant for the purposes of this study. AHIMS 36-4-0203 is recorded as a yellow-orange chert core (106 mm x 94 mm x 81 mm), identified on red-brown silty soil close to the boundary fence (Figure 5.2). At the time of the original survey, the site condition was noted as disturbed, likely associated with the construction of the fence, markedly reducing the potential for secure archaeological subsurface deposits at this locale.

The recorded location of AHIMS 36-4-0203 is likely in error, and the site was likely recorded on the western side of the property boundary rather than the eastern site (ie ~10 m east of its current location). Both sites appear to have been recorded as part of the Wellington Solar Farm development, which surveyed the Wellington Substation property (Lot 1 DP1226751) as part of the assessment for a proposed HV line. AHIMS 36-4-0201 is recorded within this lot. It is unlikely that the property of the current project (Lot 32 DP622471) was surveyed, as it is not included in the survey area identified on site card. Hand-held GPS devices typically have a margin of error, between 3 m and 10 m depending on the unit, which may account for the error.

With respect to site distribution, the registered sites in the region appear to largely reflect compliance-based assessments, namely associated with developments associated with the Wellington Solar Farm north of the project area (n=36, 65%). Therefore, the uneven, high-density clustering of sites in some areas in and not in others, is more likely indicative of the level of past investigation in these locales, rather than any discernible archaeological patterning. However, the high-effort, intensive archaeological investigation undertaken at the Wellington Solar Farm can provide a good guide for site prediction on similar landforms or contexts. Where present, the sites do appear to be clustered on the edges of relatively minor (third order or above) watercourses and/or the bases of relatively elevated locales (for example, the base of the localised hills north of the project area).

Table 5.1 Summary of AHIMS site types within the search area.

Site type	Number of sites		% of Total	
	Category total	Sub-category total	Category total	Sub-category total
Artefactual site	43		78.18	
<i>Isolated artefact</i>		21		38.18
<i>Low density artefact scatter</i>		1		1.82
<i>Artefact site (unspecified density)</i>		21		38.18
Burial site	1		1.82	
Bora/ceremonial site, modified tree (carved)	1		1.82	
Modified tree (carved or scarred)	6		10.90	
<i>Scarred tree</i>		3		5.45
<i>Unspecified modified tree (carved or scarred)</i>		3		5.45
Potential archaeological deposit (PAD)	2		3.64	
Not specified	2		3.64	
Restricted site	2		3.64	
Total	55	-	100	-



Source: EMM (2022); AMPYR (2022); ESRI (2021); OEH (2021); DFSI (2017); DPI (2015); ICSM (2014); GA (2011)

0 0.5 1 km
GDA 1994 MGA Zone 55
N

KEY

- Development boundary
- Major road
- Waterbody

Strahler stream order

- 1st order
- 2nd order
- 3rd order
- 4th order
- 5th order
- 6th order
- 9th order

AHIMS site type*

- Burial site
- Culturally modified tree (carved or scarred)
- Isolated artefact
- Low density artefact scatter (1-10)
- Not a site
- Post contact site
- Potential archaeological deposit
- Undefined artefactual site

AHIMS sites

Wellington Battery Energy Storage System
Aboriginal cultural heritage assessment
Figure 5.2



* Two AHIMS records have a restriction applied, may or may not be within the view extent

5.5 Predictive model

On the basis of the archaeological sites registered in the region, a review of previous archaeological studies and the environmental context, the following conclusions can be drawn regarding the potential presence and location of Aboriginal sites within the project area. These predictions are largely based on the modelling undertaken for the Dubbo LGA Aboriginal Heritage Study (OzArk 2020, pp. 46–48).

- The following site types and characteristics would be expected in the project area where disturbance has not resulted in their loss:
 - On first order drainage lines and headwaters, such as those to the north and east of the project area, are unlikely to retain evidence of occupation, though isolated artefacts associated with the very low density background scatter – common to all areas of NSW – may be present. Isolated artefacts are one of the most common type of sites in the region, and have been identified in all environmental contexts, regardless of previous disturbance.
 - Isolated finds and/or small artefacts scatters, likely with low variation in tool type and materials, may be associated with second order drainage lines, like the one mapped on the western boundary of the project area. These may have been disturbed or removed as a result of agricultural practices.
 - Culturally modified trees (scarred or carved) are rare, as scars are only likely to be present on trees at least 80–100 years old, and natural vegetation in the Dubbo region has been altered by fire and agricultural/pastoral practises. Considering aerial photography from 1959 to present, some mature trees may be present within the project area that may fit this criterion. Many of the recorded trees in the region have been destroyed in bushfires or removed to museums or keeping places (in this instance, particularly carved trees).
- The following site types and characteristics are expected in the broader region, but are unlikely to occur in the project area:
 - On third order waterways, occupation may be more frequent and intense, in the form of higher density artefact scatters with more diverse forms and functions, as is associated with more permanent or repeated occupation by small groups.
 - On higher order (4th order and above) waterways, more permanent and repeated occupation may be evidenced by a more diverse stone tool assemblage indicating greater range of lithic activities. Notably, large and complex sites with are expected on level, well drained terrace landforms within a few hundred metres of the Wambuul-Macquarie River; depending on the locale, cultural evidence may have been removed due to high flow events, or buried by silt (therefore requiring subsurface investigation to validate).
 - Quarries may be present on outcrops of raw stone materials suitable for artefact manufacture, many of which occur within the study area as localised, discrete outcrops of siliceous rocks (pebble beds, quartz veins or outcrops). Types of stone used in the manufacture of tools include chert, silcrete, quartz, quartzite and fine-grained volcanic rocks. Where documented, raw material procured for artefacts nearby tend to be sourced from river cobbles.
 - Rockshelters with art or deposit are found only in areas with suitable rock overhangs, such as sandstone outcrops with cavernous weathering. Large granite boulders and limestone rock shelters were also used as shelters. The project area lacks the sharp topography and/or outcropping suitable for this kind of site type.

- Grinding grooves are most commonly found near creek lines with suitable sandstone outcrops. Sandstone slabs were also transported into areas where there was no suitable stone. Suitable sandstone has been identified to occur sporadically near water within the Dubbo LGA.
- Middens of bone, charcoal, stone and freshwater shells may occur along extensive and reliable river systems. However, none are recorded in the regional landscape, and are unlikely to occur within the project area. If present, they are most likely to occur in association with open camp sites close to substantial waterways like the Wambuul-Macquarie River, ~2 km south of the project area. A midden site is reported to be associated with AHIMS 36-4-0128 (HeritageNSW 2005) but this is not recorded on the database.
- Burial sites are rare, and historical sources indicate that they are most likely to be found on sandy, alluvial flats near water (away from the bank). Burials may be difficult to identify, as features that were used by Aboriginal people to mark graves, including carved trees and earth mounds, are unlikely to be preserved, particularly in agricultural settings. One burial has been recorded in what appears to be a nature reserve or empty lot in Wellington township.
- Natural or mythological sites for ceremonial purposes are rare across the landscape and are rarely demarcated by physical evidence. Typically, these sites are located on prominent landscape features (for example, the tops of hills or escarpments), or on floodplains or flats where many people can congregate; neither of these features are present within the current project area. However, it is considered that these locations may occur anywhere, and may only be identified through consultation with traditional owners.

6 Archaeological survey

6.1 Key findings

- An archaeological field survey was undertaken by EMM archaeologists and representatives of the RAP organisations and native title applicants. The field survey undertook a general overview of the project area, and a targeted investigation of the proposed surface activities for the project, including the power line corridor and access track upgrade.
- No Aboriginal objects or areas of subsurface potential were identified within the project area. No intangible values or places within the project area were identified by the participating RAPs.

6.2 General aims

EMM archaeologists Georgia Burnett and Megan Sheppard Brennand conducted an archaeological field survey of the project area with the assistance of three RAP site officers on 1st December 2021 (see Section 2.3). An overview of the survey tracks completed for the survey is shown on Figure 6.1.

The primary aims of the survey were to:

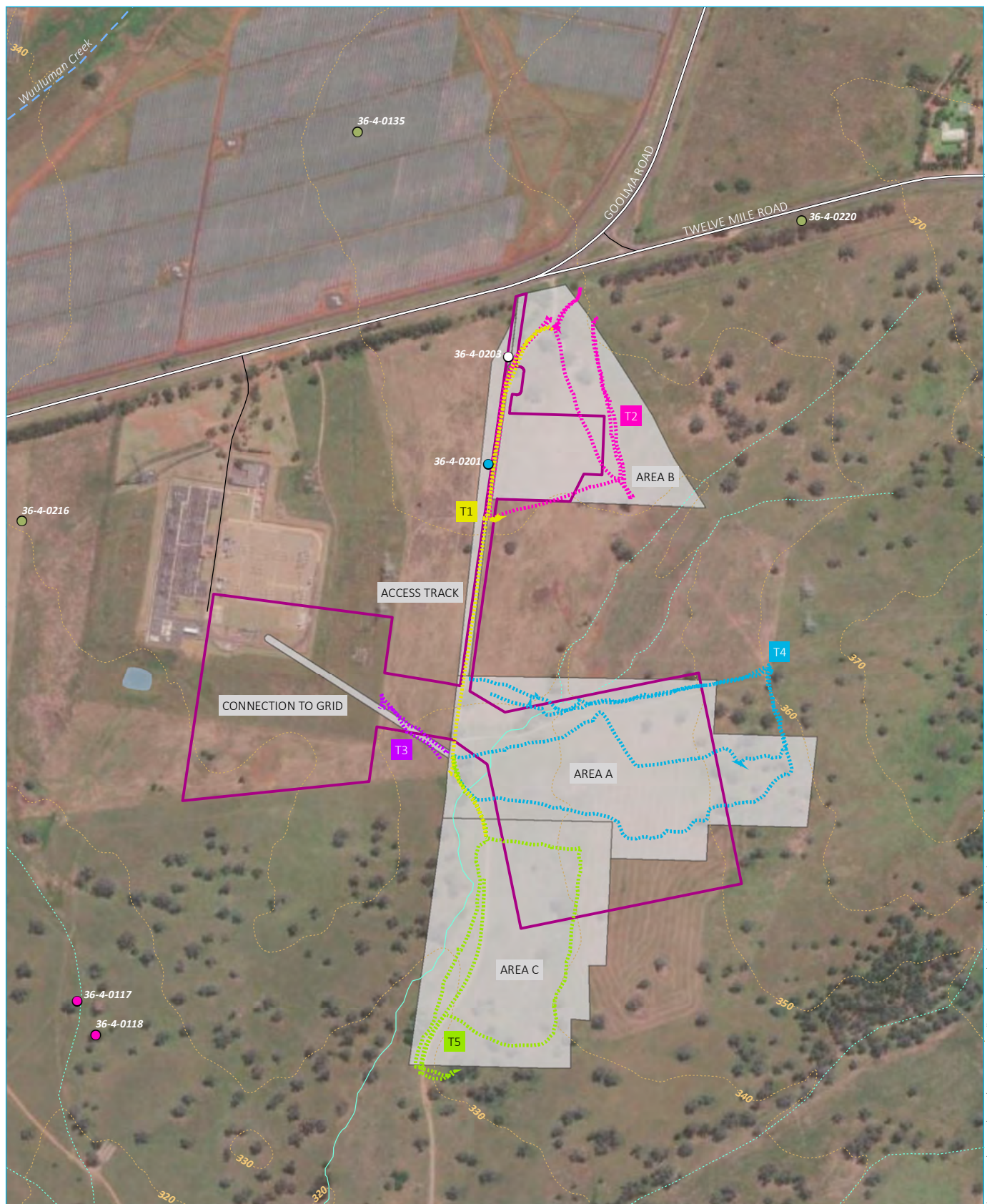
- identify Aboriginal archaeological sites and/or Aboriginal places with the assistance of Aboriginal knowledge holders;
- characterise the landscape to aid predictions of archaeological potential;
- identify sites or areas that would require further investigation if planned for development as part of the project;
- identify sites or areas to be avoided by development, where possible; and
- identify areas with minor or negligible Aboriginal cultural heritage values that are most suitable for development.

The survey was undertaken prior to finalisation of the project design, with the area surveyed considerably larger than the project boundary (Figure 6.1). The field investigation was undertaken across five survey areas, based on three separate options (Areas A-C) for the placement of the BESS, as well as the access track and the connection to the grid option, to determine archaeological potential of the project site. The coverage by the survey both within and outside the project area allowed for a more detailed impact assessment and for potential project design changes during the constraints identification and assessment process.

Following completion of the field survey, the project was amended to include an expanded area within the TransGrid Lot 1 DP 12265751 in support of proposed upgrade works for the existing Wellington substation, along with minor additional impact area associated with proposed site access and road upgrade works as recommended in the traffic impact assessment report. In consideration of:

- the findings of the ACHA – no cultural materials were identified from the survey and it is considered that the project area has low potential to feature cultural materials as surface or subsurface deposits;
- the disturbed nature of the TransGrid lot;
- field investigation coverage for the project, along with coverage and outcomes of survey associated with numerous other projects in the immediate vicinity, including the Wellington Gas Pipeline and Power Station project, which included survey adjacent to and within the extended project boundary within the TransGrid lot (refer Figure 6.1); and
- additional field survey within the small portion of the TransGrid lot not previously surveyed was not considered as warranted.

Following the amendments associated with the expanded project boundary within the TransGrid lot, the ACHA was updated and a revised draft was reissued to all RAPs on 6 September 2022 accompanied by an email specifying a 28-day timeframe for review (refer Appendix B.6). No comments from RAPs have been received in response.



Source: EMM (2022); AMPYR (2022); ESRI (2022); OEH (2021); DFSI (2017); DPI (2015); ICSM (2014)

KEY

- Development boundary
- Study area
- Major road
- Minor road
- Topographic contour (10 m)

- Waterbody
- Strahler stream order
- 1st order
- 2nd order
- 3rd order

- AHIMS site type***
- Isolated artefact
- Not a site
- Potential archaeological deposit
- Undefined artefactual site

- Survey transect**
- ⋯ Transect 1
- ⋯ Transect 2
- ⋯ Transect 3
- ⋯ Transect 4
- ⋯ Transect 5

Survey transects

Wellington Battery Energy Storage System
Aboriginal cultural heritage assessment
Figure 6.1

* Two AHIMS records have a restriction applied, may or may not be within the view extent

6.3 Approach and methods

The archaeological survey and data collection methods followed Section 2.2 of the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010a). Each survey participant was spaced approximately 10 m apart, and the survey area was covered by five transects (Table 6.1). This method was considered to be suitable for a gently undulating landscape, whereby suitable ground exposures were easy to identify and targeted at this spacing. Due to low visibility along the entire project area, the assessment calculations assume that each participant could identify and inspect exposures within 5–10 m either side of them, therefore effectively surveying all ground surface exposures within the project area. Notwithstanding, this calculation does not account for more obtrusive site types such as grinding grooves and scar trees which are observable from a much greater distance.

The survey team targeted ground exposures along transects, outcropping bedrock and water sources where present, as the most likely places for cultural materials to be found. However, it should be noted that archaeological surveys are inherently limited by ground surface visibility conditions and therefore any survey, despite the intensity of survey effort and spacing of survey transects, is considered to only *sample* the archaeological landscape. The archaeological survey did not aim to cover the entire ground surface within the project area, but rather to characterise the archaeological landscape.

The effectiveness of the survey is determined through recording and analysing survey coverage data. It is evaluated for its effectiveness in identifying the distribution of Aboriginal objects across the landscape, taking into account the potential for archaeological deposits. The percentage of the ground surface exposed in each landform and the visible ground surface within exposures (as ground exposures are often obscured by vegetation, gravels, etc) influences the survey results. For example, an archaeologically sensitive landform surface that is highly exposed by erosion is likely to reveal Aboriginal objects, whereas a similar landform that is thickly grassed will obscure surface artefacts if they are present. Overall, calculation of effective survey coverage is used to estimate not only how much area was physically surveyed, but also how favourable the survey conditions were for the identification of Aboriginal sites.

Site recording was completed in accordance with the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010a). Site locations and their details were recorded with digital tablets using site recording forms created by EMM on the Survey123 application for ArcGIS (Esri© software). The digital tablets had a location accuracy of up to ± 3 m which is similar to hand-held non-differential GPS units (~ 5 m). The Survey123 forms allowed for a site's location, details and representative photographs to be linked together, which avoided potential post-fieldwork issues around data integrity.

Survey transects were recorded as tracks on GPS units and detailed information about each transect recorded on a separate Survey123 form created by EMM. The Survey123 form allowed for survey transects starting points, details and representative photographs to be recorded. The course of survey transects were recorded as tracks on hand-held non-differential GPS units which were linked to the Survey123 forms. Following completion of the survey, areas south of the substation were added to the project area. This additional area is situated entirely within the substation lot and partially within the substation footprint, and is likely considerably disturbed as a result of activities associated with the construction of the substation. Observations from the proposed connection to grid portion of the survey area suggest the area is similar to the surveyed locale, and similarly overgrown with weeds, limiting visibility. As the survey outlined below adequately sampled the surrounding landscape, and portions of the additional area had been previously surveyed as part of other assessments (Figure 5.1), no further fieldwork was required at this time.

6.4 Results

Overall, the field investigation encompassed five survey areas covering 2.6 hectares of effective coverage (Table 6.1). Overall, exposure was relatively low (\bar{x} =36%) with an average visibility of ~42%, and average effective coverage of ~10% (Table 6.1). The survey was hindered in places by dense ground cover (including invasive weeds) as a result of recent rain.

The project area is positioned within regional setting of low hills, with the surveyed areas are situated on an undulating plain with a slow rise in elevation to the east (Plate 6.2, Plate 6.3). The project area has been extensively cleared for farming and non-native trees, such as pines and shrubs, have been planted, mostly along the access track. There are some older native eucalyptus trees notably in the east of Area A (Plate 6.4). Thistles and tall grasses grow across the project area, limiting safe pedestrian access to some areas, particularly the far east of Area B and the connection to grid in the west.

There is one second order non-perennial tributary of the Wambuul-Macquarie River mapped through the project area on the western boundary, and headwaters with two first order streams mapped further upslope to the northeast outside the project area. On the ground, it is evident that these “watercourses” are simply depressions in the topography of the landscape, and likely only experience water flow during significant rainfall (Plate 6.5). Despite recent heavy rain prior to the survey, no water (flowing or still) was observed, but recent flash flooding was apparent where the depression in the southern portion of Area C. As discussed below, it is possible these depressions are a modern development in the landscape, the consequence of widespread soil destabilisation across the project area from land clearing. In any case, as it lacks reliable flow, it is unlikely these waterways would have been attractive or reliable resources for Aboriginal people, especially with the more substantial Wambuul-Macquarie River relatively nearby (~2 km south). In addition, disturbance from flooding was present in the banks of the creeks, with still waterlogged collapsed sections of the bank and no water remaining in the creek bed. The soil profile observed in this section along the drainage line was a disturbed shallow clay loam topsoil over bedrock, unlikely to preserve Aboriginal artefacts. Flattened grasses, boggy soils and vegetation debris were observed in various points near the drainage depression (Plate 6.6).

Due to recent rains, much of the survey area was covered in thick ground cover, resulting in relatively low visibility. Limited exposures across the project area, namely in areas of flooding near the 2nd order waterway and the access track, demonstrated a shallow, rocky red brown silty clay loam overlying areas of outcropping limestone (Plate 6.7). These tall grasses and weeds mean that the visibility was fairly low across the entirety of the surveyed area. The areas of higher visibility were along the creek depressions to the south, where flooding had stripped the vegetation, and on and adjacent to the access track. Discussions with RAP site officers summarised in Section 2.4 indicated that nearby, this soil had not demonstrated potential for subsurface deposits to be retained as it was highly erosional.

The construction of the access track would have significantly disturbed any soils within this footprint and along the road verge (Plate 6.8). The access track also appeared to have been recently graded, with many introduced gravels visible. Farming activities such as grazing from sheep and cows, access tracks, fences and repeated land clearance were apparent across the surveyed area. As discussed in Section 3.6, some ploughing/slashing was evident in aerials but not distinguishable on site.

Two sites, both isolated finds had previously been recorded within and/or close to the Area B, namely AHIMS 36-4-0203 and 36-4-0201 (see Section 5.4) Both sites were recorded along the boundary fence line. As discussed in Section 5.4, it is likely that both sites are located within the neighbouring property (Lot 1 DP1226751). As both sites are recorded proximity to the boundary fence line, the general location within Lot 32 DP622471 was inspected; despite AHIMS 36-4-0201 being considered “not a site” on the AHIMS database, some effort was allocated to relocating the site as a precaution. Notwithstanding poor visibility at the time of survey for this assessment, this site could not be relocated despite intensive survey effort. The recorded location of AHIMS 36-4-0203 is between a recently graded access track and the boundary fence, and exhibit shallow stony soils with little topsoil; it is considered that the site had no subsurface potential.

No Aboriginal objects were observed during the site survey. No areas of subsurface archaeological potential were identified. As a result of the survey, the survey area is considered to have low archaeological potential due to the lack of permanent fresh water or other desirable resources. All mature trees were inspected within the project area and none showed signs of cultural modification. Shallow soils observed across the project suggest little subsurface potential. In discussion with RAP site officers, it was agreed that while Aboriginal people would have utilised the whole landscape of the Wellington region, the use of the project area would have likely been limited to transitory use, not long term occupation.

Table 6.1 **Survey effective coverage summary.**

Transect (survey area)	Area (m ²)	Landform	Exposure (%)	Visibility (%)	Effective Coverage (sq m)	Effective Coverage (%)	Aboriginal sites identified
T1 (access track)	8,500	Disturbed terrain (access track)	100	50	4,250	50	0
T2 (Area B)	54,100	Undulating plain	20	30	3,246	6	0
T3 (connection to grid)	3,500	Undulating plain	20	30	210	6	0
T4 (Area A)	100,000	Undulating plain, watercourse (2 nd order)	20	60	12,000	12	0
T5 (Area C)	82,500	Undulating plain, watercourse (2 nd order)	20	40	6,600	8	0
Average	49,600	-	36	42	5,261	16	0
Total	248,000	-	-	-	26,306	10	0



Plate 6.1 View down the hill slope in Area A and C, view facing west.



Plate 6.2 Surrounding hill tops and ridgelines are apparent from the project area, view southwest across Area A and C.



Plate 6.3 Eucalypts and exposures of silty clay loam soil in eastern portion of Area A and C. View southwest.



Plate 6.4 Dry depression in Area A and C. View southeast.



Plate 6.5 Flattened grasses likely from sheep grazing and rainfall in Area B, view north.



Plate 6.6 Shallow, rocky red brown silty clay loam overlying areas of outcropping limestone, view southeast.



Plate 6.7 Access track, view south.



Plate 6.8 Disturbance from farming activities in Area A and C - sheep grazing, land clearing, small access tracks, and fences. View west.

7 The archaeological resource

Previous archaeological studies of the region have all provided a consistent and good understanding of the past peopling, visitation and occupation of the project area and surrounds. A combination of cultural and compliance-based investigations demonstrate that long-term occupation in the Wellington Valley region was likely centred on major rivers, such as the Wambuul-Macquarie River and Bell's River, with more sporadic short-term occupation and/or transitional use associated with lower order waterways. Where watercourses are non-permanent and/or ephemeral, visitation was likely restricted to incidental use related to transitioning from place to place.

A review of the cultural heritage management investigations and the AHIMS database indicate that the cultural materials that demonstrate this past behaviour are almost exclusively in the form of surface and/or shallowly buried stone artefacts. Culturally modified trees are also present in the region where historical clearing has been limited. These sites are typically found adjacent water courses, and/or on elevated flat areas adjacent to water. These cultural materials are sparse, and often consist of single or <10 stone artefacts, reflecting the transitory/seasonal nature of activities in the region.

With specific reference to the project area, the predictions based on background research and nearby assessments suggested that if present within the project area, Aboriginal cultural material would be in the form of isolated and/or low density artefacts associated with the ephemeral drainage lines. Additionally, there is one documented site within the project impact area, however it is likely that the location of this site is in error. As discussed in Section 5.4, evidence suggests this site was recorded as part of investigations relating to the adjacent Wellington Wind Farm assessment and this site is likely on the western side of the boundary fence line (ie ~10 m west of the current recorded location). This site could not be relocated at its recorded location at the time of survey, further demonstrating that the recorded location is likely in error. No further Aboriginal objects were documented during the on site investigations for this assessment. Discussions with RAP site officers during the site inspection resulted in general agreement the site would have been of low utility for Aboriginal people in the past, with more desirable and rich resources relatively nearby.

Offset against the potential for cultural materials is the historical and modern activities of that have occurred within the project area. As discussed in Section 3.6, the project area has been used for low -to-high agricultural use in the historical period and has been extensively cleared and worked over. This use has likely destabilised the already shallow soils of the project area (commonly <15 cm, up to 30 cm), and resulted in widespread erosional processes across the project area. Consultation with RAP site officers during the site inspection resulted in general agreement that the shallow soils of the project area are unlikely to retain subsurface archaeological potential. As a result, no areas of subsurface archaeological potential have been identified within the project area.

Discussions with the local Aboriginal community (Section 2) have not identified any project specific cultural places or values that would be affected by the project. Focus of these conversations has been on the importance of the Wambuul-Macquarie River, which is considerably distance from the project area.

8 Significance assessment

8.1 General

All Aboriginal objects in NSW are protected under the *National Parks and Wildlife Act 1974*. It is recognised that the destruction of sites may be necessary to allow other activities or developments to occur. In order for the consent authority to make informed decisions on such matters, an important element of cultural resource management is determining the significance of cultural heritage places and objects to understand what may be lost; and how best it can be mitigated. However, it is highlighted that something can be of little or no significance and still be protected under the Act.

Cultural significance is outlined in Article 1.2 of the *Burra Charter* – the best practice document for managing cultural heritage – as ‘aesthetic, historic, scientific, social or spiritual value for past, present or future generations’ (Australia ICOMOS 2013). These values are reiterated in the NSW guidelines, which determines cultural significance of a place can be assessed by identifying the values that are present across the subject area and assessing what is important and why (OEH 2011). In assessing the scientific significance of sites, aspects such as rarity and representativeness and the integrity must be considered. Generally speaking a site or object that is rare will have a heightened significance, although a site that is suitable of conservation as ‘representative’ of its type will also be significant. Conversely an extremely rare site may no longer be significant if its integrity has been sufficiently compromised.

The criteria adopted for this report are defined in Table 8.1.

Table 8.1 A summary of criteria used to assess the cultural significance (OEH 2011, p. 8–10)

Criterion	Definition
Social value – Does the place have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons?	<p>Social (or cultural) value refers to the spiritual, traditional, historical or contemporary associations and attachments the place or area has for Aboriginal people. Social or cultural value is how people express their connection with a place and the meaning that place has for them.</p> <p>Social or cultural value can only be identified through consultation with Aboriginal people.</p>
Historic value – Is the place important to the cultural or natural history of the local area and/or region and/or state?	<p>Historic value refers to the association of a place with a historically important person, event, phase or activity. Historic places do not always have physical evidence of their historical importance (such as structures, planted vegetation or landscape modifications). They may have ‘shared’ historic values with other (non-Aboriginal) communities.</p>
Scientific (archaeological) value – Does the place have potential to yield information that will contribute to an understanding of the cultural or natural history of the local area and/or region and/or state?	<p>Scientific (archaeological) value refers to the importance of a landscape, area, place or object because of its rarity, representativeness and the extent to which it may contribute to further understanding and information.</p> <p>Information about scientific values is gathered through archaeological investigation undertaken in this report.</p>
Aesthetic value – Is the place important in demonstrating aesthetic characteristics in the local, regional, and/or State environment?	<p>Aesthetic value refers to the sensory, scenic, architectural and creative aspects of the place. It is often linked with social value, and can consider form, scale, colour, texture and material of the fabric or landscape, and the smell and sounds associated with the place and its use. This value is only relevant to archaeological sites on only rare occasions, such as rockshelters that contain art, or culturally modified trees in prominent positions, etc.</p>

8.2 Statement of significance

From a scientific perspective, the archaeological investigations undertaken for this ACHA found no evidence of surface material and predict that the nature of any subsurface material, if present, would be too sporadic and isolated to be traceable through test excavation. As such, the project area considered to have low-nil archaeological significance. The project area has been subject to some historical disturbance due to the agricultural use of the site. As such, the site is considered to have limited aesthetic values. No association with key historical individuals or organisations has been identified through the ACHA that may warrant its identification under the historic criterion.

No project specific cultural values have been vocalised by the RAPs for the project area to date. Comments received from Wellington Valley Wiradjuri Aboriginal Corporation (WVWAC) during the ACHA review period (Appendix B.6), indicate that the project area was used ephemerally as a movement corridor between Wuuluman Creek and the Wambuul-Macquarie River; and retained some aesthetic appeal. From a cultural perspective, WVWAC assert that the broader landscape has moderate cultural value. And as such, the proposed development should minimise it's visual impacts to the locale where feasible.

More broadly, discussions have identified the importance of the Wambuul-Macquarie River to the Aboriginal community, but these are both some distance from the project area; and cannot be seen, nor be seen from, the project area. As such, it is concluded that the project area has no specific cultural values aside from the broader setting of the culturally significant Wellington Valley.

9 Impact assessment

9.1 Key findings

- The project would involve earthworks and construction activities within the BESS footprint and areas of ancillary infrastructure. This would remove the upper portion of the soil profile currently present at the site.
- The project area has been impacted by past activities and natural erosional processes.
- No cultural materials have been identified within the project footprint, and are not expected to occur through further archaeological investigation. No intangible values for the project area have been identified to date, but the Wellington Valley Wiradjuri Aboriginal Corporation indicated increasing development in the region was having a cumulative impact on the cultural landscape; and as such identified cultural material is proposed for retention through the project, and attempts to minimise the visual intrusion of the project would be applied.

9.2 Project impacts

As outlined in Section 1, the proposed activity involves the establishment of the BESS building and ancillary infrastructure. The project will involve the following components:

- construction and operation of the BESS compound, comprising between 1,400–6,200 pre-assembled battery enclosures housing lithium-ion battery packs and related control equipment, and transformers and inverters with a peak maximum generation capacity of 500 MW/1,000 MWh;
- construction and operation of an on-site BESS substation, comprising two 330 kilovolt (kV) transformer bays, 33/0.440 kV auxiliary transformers, and an auxiliary services building to house supporting equipment and systems;
- connection to the adjoining TransGrid Wellington Substation by way of an underground or aboveground transmission line; and
- ancillary infrastructure to facilitate construction and operation of the project, including improvements to the existing access road and a control and office building.

While specific design details remain conceptual, it is considered probable that some construction activities would impact >1 m of the upper soil profile. The ancillary activities would require less disturbance, however the installation of roads, services, etc. would typically undertake the removal of topsoil and compaction prior to establishment, and therefore impacts to the ground surface of at least 50 cm would be expected. All of these activities would require removal of trees and other surface debris (eg loose stones, etc) prior to establishment.

9.3 Aboriginal heritage impact

Two Aboriginal sites are registered within the project area (AHIMS site 36-4-0201 and 36-4-0203), neither site was able to be relocated during the survey. Although AHIMS 36-4-0201 is registered as “not a site” on the AHIMS database, relocation of the site was attempted as a precaution. No Aboriginal places or deposits were identified within the project area. The project area has been subject to disturbance that has likely eroded or displaced the shallow soils of the project area. The soil profile observed during the survey was a highly erosional shallow, rocky red brown silty clay loam overlying areas of outcropping limestone. Discussions with RAP site officers summarised in Section 2.4 indicated that nearby, this soil had not demonstrated potential for subsurface deposits to be retained as it was highly erosional.

No Aboriginal objects were observed during the survey of the project area, and no areas of subsurface potential warranting further investigation were identified. As such, it is considered that the project is unlikely to have an impact upon tangible cultural material to a traceable level. No site-specific intangible or cultural values were identified through research or Aboriginal stakeholder consultation during the ACHA process, and the proposed works would therefore be unlikely to impact such places based on current evidence.

Consultation with the local Aboriginal community has highlighted the importance and cultural values of a number of places and sites in the general region, including the Wambuul-Macquarie River. However, no project area specific places or values were advised. While on site discussions confirmed that no known (but in some cases undocumented) sites are present within the project area, subsequent comments received from WVVAC during the ACHA review period, indicate that this is due to the multigenerational loss of knowledge, and that the project area and surrounds were used as a movement corridor between Wuuluuman Creek and Wambuul (Macquarie River). WVVAC advised that the site-specific knowledge of areas their ancestors used within this project area or the wider visually identified landscape has been lost and therefore are of the view that, there will be a cultural value loss relating to the landscape and anthropologically relating to their cultural landscape management and use. This concern has been addressed through the:

- i) the avoidance of identified cultural materials;
- ii) the inclusion of WVVAC in the development of the post-approval management plan to further explore and manage these concerns; and
- iii) recommendations that the development attempt to minimise the visual impact on the locale.

9.4 Cumulative impacts and intergenerational loss/equity

Intergenerational equity is the principle whereby the current generation should ensure the health, diversity and longevity of the environment for the benefit of future society. For Aboriginal heritage management, intergenerational equity can be considered primarily in terms of the cumulative impacts to Aboriginal objects, sites and/or places in a region. If few Aboriginal objects and places remain in a region (eg due to development impacts), there are fewer opportunities for future generations of Aboriginal people and the broader community to enjoy the cultural benefits.

Information about the integrity, rarity and representativeness of the Aboriginal objects, sites and places that may be impacted, and how they inform the past visitation and occupation of land by Aboriginal people, are relevant to the consideration of intergenerational equity and the understanding of the cumulative impacts of a project.

No cultural materials were identified during the ACHA investigation. WVVAC commented, during the ACHA review period, that developmental impacts, as opposed to avoidance, are compounding the continual intergenerational loss of cultural sites, cultural landscape and cultural knowledge in the region. In the case of this project, avoidance of identified cultural materials is proposed to offset this loss wherever feasible.

10 Management strategy and recommendations

10.1 Key findings

- The ACHA concludes that the project is unlikely to impact Aboriginal cultural material to a traceable level through archaeological investigation. Notwithstanding there is always residual potential for unexpected finds to be uncovered during broad scale earthworks associated with project construction. As such, protocols are required in the event that unexpected Aboriginal objects are uncovered in the project area.
- Recommendations are proposed for inclusion in the project approval to guide post-approval requirements for Aboriginal heritage (Section 10.3). These include the development of an Aboriginal Cultural Heritage Management Plan to provide a framework for such activities, as well as direction on its content.

10.2 Management strategy

In NSW, Aboriginal objects are provided with statutory protection by the *National Parks and Wildlife Act 1974*. In general, where a proposed activity will result in harm to an Aboriginal object, an application must be made to Heritage NSW and an Aboriginal Heritage Impact Permit (AHIP) must be granted before any harm may occur. If granted, the AHIP will contain conditions intended to manage and mitigate the identified impact, and allowing harm to proceed.¹ For works proposed to be assessed under Division 4.7 of the EP&A Act, an AHIP is not required. Any identified harm and any mitigation measures will instead be managed through the project's conditions of approval. The conditions of approval generally incorporate Aboriginal heritage management requirements based on advice from Heritage NSW, and the ACHA.

For the purposes of this project, recommendations below include the development of an Aboriginal Cultural Heritage Management Plan (ACHMP) to provide the post-approval management framework for all future Aboriginal heritage requirements for the project. They further outline the specific mitigation measures that should be implemented prior to, during and after the development. These are relatively minor, since no cultural materials were identified, and include measures to ensure the continuation of Aboriginal consultation and engagement, appropriate documentation of the works to date, unexpected finds protocols, and lodging the ACHA with appropriate public repositories.

10.3 Recommendations

The following recommendations are made to be included within the Minister's Conditions of Approval (MCoA) for the State Significant Development # 27014706, with regards to Aboriginal cultural heritage:

- All site personnel should be made aware that there are registered Aboriginal sites within the vicinity of the project area and therefore must not undertake ground disturbance outside of approved areas. Appropriate signage and temporary fencing should be erected around AHIMS 36-4-0203 to ensure no inadvertent impacts occur to this site.

¹ Where an ACHA does not identify any Aboriginal heritage within a development area, works may proceed based on the recommendations of the ACHA, which may include a range of requirements associated with consultation, continual monitoring and/or other on-site/off-site needs. Such a project can still have significant risks, since where cultural material is encountered unexpectedly, it can result in significant delays.

- Prior to ground disturbance, an Aboriginal cultural heritage management plan (ACHMP) must be developed by a heritage specialist in consultation with the Aboriginal stakeholders and consent authority to provide the post-approval framework for managing Aboriginal heritage within the project area. The ACHMP should include the following aspects:
 - a workshop between the archaeologists and the RAPs prior to undertaking the ACHMP to develop the approach to the document as requested by WVVAC during the ACHA review period;
 - Liaise with the RAPs in developing suitable visual strategies to minimise impacts of the project to the broader cultural landscape (eg cultural plantings, screening, paint styles, etc);
 - process, timing, and communication methods for maintaining Aboriginal community consultation and participation through the remainder of the project;
 - description and methods for undertaking further Aboriginal heritage assessment, investigation and mitigation of any areas of the project area that have changed following completion of the Aboriginal heritage assessment and/or during the final design and construction phases of the project;
 - procedures for managing the unexpected discovery of Aboriginal objects, sites and/or human remains during the project and delivered through an Aboriginal Cultural Heritage Induction Program developed and delivered by the RAPs onsite to ensure culture, heritage and artefactual materials are identified and managed appropriately;
 - procedures for the curation and long-term management of cultural materials if recovered as part of unexpected finds; and
 - processes for reviewing, monitoring, and updating the AHMP as the project progresses.
- The Construction Environment Management Plan (CEMP), or equivalent, should reinforce how the cultural landscape is considered throughout the project and detail the rehabilitation of the project area. This should be undertaken in consultation with the RAPs. The CEMP should be distributed to the RAPs for their records.
- Consultation should be maintained with the RAPs during the finalisation of the assessment process and throughout the construction phase of the project. Details for how this consultation should be undertaken will be outlined in the ACHMP.
- A copy of the ACHA should be lodged with AHIMS and provided to each of the RAPs.
- Where the heritage consultant changes through the project, suitable hand over should occur to minimise loss or mistranslation of the intent of the information, findings and future steps in heritage management.

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Abbreviations

AHD	Australian Height Datum
ACHA/ACHAR	Aboriginal cultural heritage assessment report
AHIMS	Aboriginal Heritage Information Management System
ACHMP	Aboriginal Cultural Heritage Management Plan
BP	Years before present
c.	circa
cm	centimetres
DEC	Department of Environment and Conservation, now DPC
DECCW	Department of Environment Climate Change and Water, now DPC
DPC	Department of Premier and Cabinet
DPE	Department of Planning and Environment, now DPIE
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EMM	EMM Consulting Pty Ltd
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
ERM	Environmental Resources Management
ESD	Ecologically sustainable development
FGS	Fine grained siliceous
g	grams
GIS	geographical information system
GPS	global positioning system
ha	hectare
ICOMOS	International Council on Monuments and Sites
IMTC	Indurated mudstone/tuff/chert
ka	thousand years ago
km	kilometres
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
m	metres
m ²	square metres
mm	millimetres
n	Number

NSW	New South Wales
OEH	Office of Environment and Heritage, now DPIE
PAD	Potential archaeological deposit
RAP	Registered Aboriginal Party
SEARs	Secretary's Environmental Assessment Requirements
t	Tonne
TP	Test pit

Glossary

Many of these definitions have been taken from the *Code of Practice for archaeological investigation of Aboriginal objects in NSW* (DECCW 2010).

Aboriginal object: A physical manifestation of past Aboriginal activity. The legal term is defined in the *National Parks and Wildlife Act 1974* section 5 as: 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.

Typical examples include stone artefacts, grinding grooves, Aboriginal rock shelters which by definition include physical evidence of occupation, midden shell, hearths, stone arrangements and other landscape features which derive from past Aboriginal activity.

Archaeological survey: A method of data collection for Aboriginal heritage assessment. It involved a survey team walking over the land in a systematic way, recording information. Activities are not invasive or destructive.

Aboriginal culturally modified tree: A tree of sufficient age to have been mature at the time of traditional Aboriginal hunter-gatherer life and therefore generally of more than 220 years ago with evidence of bark or cambium wood removal for the purpose of implement manufacture, footholds, bark sheet removal for shelter, or extraction of animals or other food. Care must be taken to distinguish Aboriginal scars from the much more common natural causes of branch tear, insect attack, animal impact, lightning strike and dieback. Culturally modified tree recognition guidelines exist to distinguish these features. Naturally scarred trees are often misidentified as Aboriginal culturally modified trees.

Aboriginal site: The location where a person in the present day can observe one or more Aboriginal objects. The boundaries of a site are limited to the extent of the observed evidence. In the context of this report a 'site' does not include the assumed extent of unobserved Aboriginal objects (such as archaeological deposit). Different archaeologists can have varying definitions of a 'site' and may use the term to reflect the assumed extent of past Aboriginal activity beyond visible Aboriginal objects. Such use of the term risks defining all of Australia as a single 'site'.

Aboriginal stone artefact: A stone object with morphological features derived from past Aboriginal activity such as intentional fracture, abrasion or impact. Artefacts are distinguished by morphology and context. Typically flaked stone artefacts are distinguished from naturally broken stone by recognition of clear marginal fracture initiation (typically herzian/conchoidal or wedging initiation) on highly siliceous stone types which can often be exotic to the area. Care must be taken to distinguish modern broken stone in machine impacted contexts and therefore context must be carefully considered as well as morphology.

Aggradation: a term used in geology for the increase in land elevation, typically in a river system, due to the deposition of sediment.

AHIMS: Aboriginal Heritage Information Management System — a computer software system employed by the Office of Environment and Heritage to manage many aspects of Aboriginal site recording and permitting. AHIMS includes an Aboriginal sites database which can be accessed via an internet portal.

Archaeological deposit: Aboriginal objects occurring in one or more soil strata. The most common form of archaeological deposit relates to the presence of a single conflated layer of Aboriginal stone artefacts worked into the topsoil through **bioturbation**.

Backed artefact: A thin flake or blade-flake that has been shaped by secondary flaking (**retouch**) along one lateral margin. The retouched margin is typically steep and bipolar to form a blunt 'back' in the manner of a modern scalpel blade. Distinctive symmetrical and asymmetrical forms are typically found called geometric **microliths** and Bondi points respectively. A thick symmetrical form, called an Elouera, is typically the size of a mandarin segment.

Bioturbation: is the reworking of soils and sediments by animals or plants. Its effects include changing texture of sediments (diagenetic), bioirrigation and displacement of microorganisms and non-living particles.

Bipolar flaking: Where the stone to be worked is rested on an anvil or other stone before being hit by the hammerstone. This results in the presence of negative flake scars on both ends of the core.

Bondi point: See backed artefact definition.

Brown podosols: Topsoils have loamy textures. A2 horizons are common, there is a clear boundary onto the B horizon. They have a sandy clay to heavy clay texture (typically occur on upper and mid-slopes).

Chocolate Soils: Soils that are typically formed in a basaltic parent material where slope or bedrock strata influence drainage. Surface horizons comprise loam, clay loam or silty clay loam. There is a gradual boundary to a brown or brownish black B horizon. There is no A2 horizons.

Conchoidal: A term used in relation to fracture surfaces on Aboriginal stone artefacts - bulb-like in the manner of a bulbous protrusion on a bivalve shell.

Elouera: See backed artefact definition.

Erillure scar: The small flake scar on the dorsal side of a flake next to the platform. It is the result of rebounding force during percussion flaking.

Exposure: estimates the area with a likelihood of revealing buried artefacts or deposits, not just an observation of the amount of bare ground.

Geometric microlith: See backed artefact definition.

Grinding grooves: Grinding grooves typically derive from the sharpening of stone hatchet heads on sandstone rock. Grooves appear as elliptical depressions of around 25 cm length with smooth bases. Although mostly occurring in association with water to wash the abraded stone dust away from the groove, such sites have been recorded away from water. Narrow grooves or broad abraded areas may occur less commonly and may be derived from spear sharpening or other grinding activities.

Haematite: a pigment featured in ochre used for tinting with a permanent colour.

Holocene: A period of time generally 10,000 years, which marks the end of the last ice age, to the present.

Igneous: relating to or involving volcanic or plutonic processes.

Indurated mudstone/tuff (IMT): the fine textured, very hard, yellowish, orange, reddish-brown or grey rocks from which stone artefacts are made.

Isotropic: Having a physical property that has the same value when measured in different directions. In relation to stone used for stone tools a fracture path is not hindered by layer boundaries or other favoured plane of cleavage.

Keeping place: A room or facility with the express and exclusive purpose of storing Aboriginal cultural heritage materials with accompanying documentation in a secure and accessible manner which protects their cultural heritage values.

Knapping: This term is used in reference to stone tool production. Specifically it relates to the production and shaping of a block of stone (eg a cobble) into a stone tool. The process is called knapping, while the individual undertaking the task is often called a knapper. A knapping floor or event often referenced in the literature relates to an archaeological deposit, usually of high densities of stone artefacts, where researchers believe this process has occurred in a given locale.

Krasnozems: Mainly loams, clay loams and silty clay loams with a clear or gradual boundary to a dark reddish brown B horizon. Clays are typically light to medium and occasionally heavy.

Lithosols: Soils that have little or no profile development. They occur on steep slopes and are usually shallow and are left mainly as uncleared native bushland.

Microlith: Very small fragments of flakes retouched into geometric shapes and usually present on tools like barbed spears, arrows and sickles.

Midden: A collection of shells and associated economic remains resulting from Aboriginal food gathering and processing activity. Middens comprise shellfish remains of consistent size in a rich dark earth matrix commonly associated with stone artefacts, fish bone and animal bone although shells are commonly the most obtrusive element.

Open stone artefact site/stone artefact site: An unenclosed area where Aboriginal stone artefacts occur – typically exposed from a topsoil archaeological deposit by erosion. Typically the term is used to refer to two or more artefacts although this is an arbitrary distinction. A general ‘rule of thumb’ boundary definition employed by archaeologists is that artefacts or features more than 50 m apart are regarded as separate sites, however there is no theoretical imperative dictating such a rule. (The 50 m separation rule is used for the most part in EMM’s work).

Pirri point: A leaf-shaped stone implement with unifacial retouch extending from the lateral margins to a central keel running the length of the dorsal surface.

Pleistocene: A period of time 2.6 million years ago to 10,000 years ago. Reference to ‘Pleistocene sites’ generally means reference to sites older than 10,000 years.

Podosols: Soils with accumulations of organic matter, iron and aluminium. They are usually sand textured to depth. Yellow and red podosols are generally acid neutral. Yellow podosols have coarse to medium textured A horizons.

Point cluster: A group of GPS points used to identify the locations of individual artefacts in the field.

Potential Archaeological Deposit (PAD): An area where there is an inferred presence of Aboriginal objects in the soil based on the environmental context which is typically associated with discovery of Aboriginal objects in analogous areas. This is not strictly a ‘site’ type, although AHIMS records it as such for the purpose of associating Aboriginal heritage Impact Permits with geographical areas.

Red podosols: Podosols with a pronounced texture contrast and clear to abrupt boundaries between A and B horizons. A2 is often massive and gravelly.

Retouch: The modification of the edges of a flake or tool by the removal of a series of small flakes.

Siliceous Sands: Sands that are usually found on coarse-grained sandstones and in sandstone colluvium. They are often sandstone outcrops present in the landscape. The topsoil has a loamy sand to light sandy clay.

Scarp: a steep slope characterised by outcropping bedrock. In this report, scarp refers to a combination of landform elements including scarp foot slopes, scarps, and cliff lines where outcropping sandstone is present in the landscape 10% and above.

Spit/s: This term reflects an arbitrary unit of depth that archaeologists excavate when lacking evidence of a stratigraphy within the soil profile. Commonly, archaeologists remove vertical intervals of 5, 10 or 20cm, each representing a spit, down the soil profile. Through this process, archaeologists can determine the depth at which archaeological materials are found, even in soil profiles with no clear divisions or boundaries.

Spur: the lateral crests of land that descend from the summit of hills or ridges. Spurs typically extend, with decreasing elevation, closer to streams and valley floors than the main crest of a hill.

Taphonomic: the events and processes, such as burial in sediment, leading to the degradation, decomposition or preservation of objects.

Thumbnail scraper: A thumbnail sized thin flake with steep unidirectional retouch or use-wear around a convex working edge.

Transect: A sample unit which is walking line or corridor across the project area.

Upsidence: phenomena that occurs when mining approaches and undermines river valleys. It can result in cracking and buckling of river beds and rock bars and localised loss of water flow.

Visibility: The amount of bare ground on exposures which might reveal artefacts or other archaeological materials.

Yellow earths: predominantly sandy-textured soils with earthy porous fabric, weak profile differentiation and gradual or diffuse boundaries except for the darker A1 horizon.

Yellow podosols: Podolsols which typically occur on the upper slopes of steep landscapes and on the mid to lower slopes of others. The A2 soil horizon is present in most profiles and the boundary change to the B horizon is generally clear. The B horizon is typically sandy clay to heavy clay.

Appendix A

Legislative context

A.1 Commonwealth

A.1.1 *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*

The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* preserves and protects areas (especially sacred or intangible sites) and places of particular significance to Aboriginal people from damage or destruction. Steps necessary for the protection of a threatened place are outlined in a gazetted Ministerial Declaration (Sections 9 and 1010); and which can result in a cessation of any development activity.

In addition, the Act also protects objects by Declaration, notably Aboriginal skeletal remains (Section 12). This can be applied at a State level where a State is unwilling or unable to provide such protection.

A.1.2 *Environment Protection and Biodiversity Conservation Act 1999*

The *Environment Protection and Biodiversity Conservation Act 1999* provides for protection of natural and cultural heritage places. The Act establishes a National Heritage List (NHL) and a Commonwealth Heritage List (CHL) upon which places of natural or cultural significance can be listed. Sites at a national level and can be in public or private ownership. The CHL is limited to places owned by the Commonwealth, and most frequently encompass Department of Defence sites. Sites and places listed on the NHL are considered to be of State and local heritage value, even if they are not listed or documented as such at a State level.

The values of sites and places on the NHL/ CHL are protected under the EPBC Act. The Act requires that the Minister administering the Act assess any action which has, will have, or is likely to have, a significant impact on the heritage values. Where relevant, a referral is made to the relevant Commonwealth Department, and either approval, approval with controls, or rejection of the proposed action is determined.

A.1.3 *Native Title Act 1993*

The *Native Title Act 1993* provides recognition and protection for native title. The Act establishes the managing body, National Native Title Tribunal, who administers native title claims to rights and interests over lands and waters by Aboriginal people. It also administers the future act processes that allow proponents to identify and manage potential native title issues for a given activity on a site where a claim has yet to be made or finalised.

In addition, the Act provides for Indigenous Land Use Agreements (ILUA), which is an agreement between a native title group and others about the use and management of land and waters. ILUAs were introduced as a result of amendments to the Act in 1998. They allow people to negotiate flexible and bipartisan agreements to suit their particular circumstances often circumventing lengthy timeframes associated with the native title process. An ILUA can be negotiated over areas where native title has, or has not yet, been determined. They can be part of a broader determination or settled separately.

A.2 State

A.2.1 *Environmental Planning and Assessment Act 1979*

The *Environmental Planning and Assessment Act 1979* (EP&A Act) is the over-arching Act that dictates the nature of assessment and management of the environment during a development project, and within which heritage forms a component. It requires that environmental and heritage impacts are considered by consent authorities prior to granting development approvals.

The Act has two main approval pathways within which heritage needs to be considered. Generally for smaller scale (either financially or spatially), Parts 4 (Division 4.1) and 5 (Division 5.1) of the Act are implemented. Part 4 requires that a proponent submits a Development Application (DA) to local council for a given development, and within this document a consideration of Aboriginal and historical heritage is required. The specific nature of the assessment is usually determined at a pre-DA meeting with the council, and in relation to the relevant heritage Acts. Where Aboriginal heritage is identified as an issue, the DA may become Integrated Development, whereby the State government is also required to review and provide comments on the DA prior to its issue. Part 5 of the Act is a similar process, but only relates to approvals developed and issued by State government departments. Each State government department has their own internal approach to considering environmental issues, but ultimately must develop a Review of Environmental Factors (REF), which is comparable to a DA, and which requires consideration and management of heritage. Similarly where heritage is identified as an issue, liaison with relevant State consent authorities and approvals under other Acts may still be required.

The other approval pathway relates to State Significant Development and/or Infrastructure (Parts 4.7 and 5.2, respectively). These processes require an Environmental Impact Statement (EIS) to be developed for a project and assessed currently by the Heritage NSW (formerly the Department of Planning, Industry and Environment). Importantly, the SSD and SSI processes turns off a number of pieces of other legislation, including parts of the *National Parks and Wildlife Act 1974*. In the case of Aboriginal heritage, both the assessment and approval for harm are dictated by the Secretary's Environmental Assessment Requirements (SEARs) outlining the contents and scope of the EIS, and the Project Approval that dictates controls on how a development should proceed.

A.2.2 *National Parks and Wildlife Act 1974*

The National Parks and Wildlife Act 1974 (NPW Act) provides protection for Aboriginal objects and places across NSW:

- An Aboriginal object is defined as: 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.
- An Aboriginal place is: any place declared to be an Aboriginal place under Section 84. This is a very specific piece of legislation that provides process and management of Aboriginal sites of cultural, but not necessarily scientific, values. They are commonly, but not always associated with intangible values.
- Any place declared to be an Aboriginal place by the Minister for the Environment, under Section 84 of the Act.

It is an offence to disturb Aboriginal objects or places without an Aboriginal Heritage Impact Permit (AHIP), which is outlined in Section 90 of the Act. Currently, such permits can be sought from Heritage NSW.

To obtain an AHIP, certain assessment and documentation (outlined in this report) must be provided to DPC for their consideration. Once satisfied, they may endorse an AHIP to harm cultural heritage either conditionally or unconditionally. They can also refuse an application as outlined in Section 90C of the Act, and which can be appealed in accordance with Section 90L.

A.2.3 *Aboriginal Land Rights Act 1983*

The *Aboriginal Land Rights Act 1983* provides process and protocols for the transfer of vacant Crown land ownership to a Local Aboriginal Land Council, where the land is not for an essential purpose or for residential land. These lands are then managed and maintained by the Local Aboriginal Land Council.

For the purposes of this report, the Act is primarily important to inform relevant Aboriginal communities for consultation; and where Crown land forms part of the development area may require additional liaison with the LALC as a potential, or existing, landowner.

Appendix B

Aboriginal community consultation

B.1 Consultation log and communication record

Aboriginal Consultation Requirements for Proponents (DECCW 2010)*
ABORIGINAL COMMUNICATIONS LOG
Project Name: Wellington Battery Energy Storage System

Project #: J210534

DATE	OUTGOING / INCOMING	ORGANISATION	CONTACT MADE BY	CONTACT TO	CONTACT TYPE	COMMENTS
AGENCY REQUESTS						
06-Aug-21	Outgoing	Heritage NSW Dubbo Regional Council NTSCorp Greater Sydney Local Land Services (LLS) National Native Title Tribunal (NNTT) Wellington Local Aboriginal Land Council (WLALC) Office of the Registrar, Aboriginal Land Rights Act	Cameron Neal (EMM)	Various	Email	Requested information on local Aboriginal knowledge holders.
06-Aug-21	Incoming	LLS	Customer Service Team	Cameron Neal (EMM)	Email	Distanced themselves from the consultation process, suggested contacting Heritage NSW.
09-Aug-21	Incoming	NNTT	Geospatial Searches	Cameron Neal (EMM) Georgia Burnett (EMM)	Email	Confirmed no Native Title Determination Applications, Determinations of Native Title, or Indigenous Land Use Agreements over the identified area.
19-Aug-21	Incoming	Heritage NSW	Paul Houston	Georgia Burnett (EMM)	Email	Provided stakeholder list.
NOTIFICATION						
31-Aug-21	Outgoing	Binjang Wellington Wiradjuri Heritage Survey [REDACTED] Wiradjuri Council of Elders Dubbo Local Aboriginal Land Council Wellington Local Aboriginal Land Council	Cameron Neal (EMM)	Various	Email	Distributed letter with project information and requested registrations of interest by COB 15 September 2021
31-Aug-21	Outgoing	Brian Draper Central West Catchment Management Authority Dubbo Aboriginal Community Working Party Katrina McKinnon Mooka Nataasha Rodgers Paul Brydon Peter Peckham Trevor Robinson Wamarr Cultural Consultants Wellington Valley Wiradjuri Aboriginal Corporation Wiradjuri Interim Working Party Wirimbah Direct Descendants David Smith Gary Smith Geoffrey Ryan Tubbagah Aboriginal Co-Op Raymond Thomas Smith William Smith	Cameron Neal (EMM)	Various	Post	Distributed letter with project information and requested registrations of interest by COB 15 September 2021
01-Sep-21	Outgoing	-	Victoria Mietchen (EMM)	Daily Liberal	Newspaper ad	Advertisement to register interest in the project appeared in the <i>Daily Liberal</i> .
02-Sep-21	Incoming	[REDACTED]	[REDACTED]	Georgia Burnett (EMM)	Email	Registered interest in the project.
02-Sep-21	Incoming	[REDACTED]	[REDACTED]	Georgia Burnett (EMM)	Email	Registered interest in the project.
10-Sep-21	Incoming	Mooka Aboriginal Community Working Party	Neville Williams	Reception (EMM)	Post	Letter was RTS. No reason provided.
15-Sep-21	Outgoing	Binjang Wellington Wiradjuri Heritage Survey	Jamie Grey	Cameron Neal (EMM)	Phone	Rang, no answer. Left a message.
15-Sep-21	Outgoing	Dubbo Aboriginal Community Working Party	Grace Toomey	Cameron Neal (EMM)	Phone	Rang, line disconnected.
15-Sep-21	Outgoing	Nataasha Rodgers	Nataasha Rodgers	Cameron Neal (EMM)	Phone	Number provided by Heritage NSW is incorrect.
15-Sep-21	Outgoing	Wiradjuri Interim Working Party	Not provided	Cameron Neal (EMM)	Phone	Rang, line disconnected.
15-Sep-21	Outgoing	Geoffrey Ryan	Geoffrey Ryan	Cameron Neal (EMM)	Phone	Spoke at length regarding project location and tribal boundaries. Geoffrey expressed frustration about the wrong people speaking for Country, as well as government attitudes towards Aboriginal people and their rights to land. Geoffrey declined to register interest in the project as it is not within the boundaries of his tribal group. Recommended EMM contact the Wellington Aboriginal Corporation Health Service as they may be able to assist in identifying local Aboriginal stakeholders.
15-Sep-21	Outgoing	Wellington LALC	Not provided	Cameron Neal (EMM)	Phone	Rang, no answer. Left a message.

15-Sep-21	Outgoing	Dubbo LALC	Not provided	Cameron Neal (EMM)	Phone	Rang, no answer. Left a message. Voicemail message indicated LALC staff are not currently in the office but admin/CEO can be reached on a separate mobile number.
15-Sep-21	Outgoing	Dubbo LALC	Admin/CEO	Cameron Neal (EMM)	Phone	Rang mobile number provided by Dubbo LALC voicemail. Number is not connected.
15-Sep-21	Outgoing	Wellington Valley Wiradjuri Aboriginal Corporation	Not provided	Cameron Neal (EMM)	Phone	Number is not connected.
15-Sep-21	Outgoing	Wellington Valley Wiradjuri Aboriginal Corporation	Not provided	Cameron Neal (EMM)	Email	Emailed providing project information with a request for registration of interest.
15-Sep-21	Outgoing	Wellington Aboriginal Corporation Health Service	Reception	Cameron Neal (EMM)	Phone, Email	Rang WACHS to seek information on local Aboriginal stakeholder groups/individuals. Spoke to Pamela who recommended emailing Anita (manager). Sent an email to Anita providing project information and seeking information on local Aboriginal stakeholder groups/individuals.
15-Sep-21	Outgoing	Binjang Wellington Wiradjuri Heritage Survey [REDACTED] Wiradjuri Council of Elders Dubbo Local Aboriginal Land Council Wellington Local Aboriginal Land Council	Cameron Neal (EMM)	Various	Email	Reminded RAPs that registration deadline ends today but we have extended it to COB Friday 17 September 2021. Attached letter with project details and relevant contact information.
15-Sep-21	Incoming	Wellington Valley Wiradjuri Aboriginal Corporation	Reception (EMM)	Brad Bliss	Phone	Brad phoned EMM reception to follow up on the email from CN. Reception informed Brad CN would call back.
16-Sep-21	Outgoing	Wellington Valley Wiradjuri Aboriginal Corporation	Cameron Neal (EMM)	Brad Bliss	Phone	Phoned Brad to follow up on his call. Brad stated both Wellington Valley Wiradjuri Aboriginal Corporation and Galangabang Corporation would like to register interest in the project - as he is on the board for both organisations he will be a single point of contact for EMM. Brad also informed CN that Binjang Wellington Wiradjuri Heritage Survey and Wellington LALC would likely wish to be involved. CN replied that he had been trying to get in touch with both organisations but without success so far. Brad was not aware of any contact details that CN did not already have for either group. Finally, Brad indicated he was aware of the presence of several scarred trees in the vicinity of the study area - these trees have only recently been registered on AHIMS (<1 month ago) and are restricted sites. CN advised Brad that an updated AHIMS search would be completed to capture these sites. Brad said he would be happy to provide the relevant site cards should the scarred trees be returned in the search area.
16-Sep-21	Outgoing	Binjang Wellington Wiradjuri Heritage Survey	Cameron Neal (EMM)	Jamie Grey	Phone	CN followed up on his call to Jamie, who stated he would like to register interest in the project on behalf of Binjang WWHS. Thaked Jamie for his time and informed him that an assessment methodology will be distributed over the coming weeks.
24-Sep-21	Outgoing	Wellington Local Aboriginal Land Council [REDACTED] Galangabang Aboriginal Corporation Wellington Valley Wiradjuri Aboriginal Corporation Binjang Wellington Wiradjuri Heritage Survey (hereafter 'All RAPs')	Cameron Neal (EMM)	Various	Email	Distributed letter with proposed assessment methods. Requested feedback by COB 22 October 2021.
06-Oct-21	Incoming	Wellington Valley Wiradjuri Aboriginal Corporation Gallangabang Aboriginal Corporations	Brad Bliss	Georgia Burnett (EMM)	Email	Provided letters in response to the methodology (see Appendix B.5 for full exchange).
22-Nov-21	Outgoing	Wellington Valley Wiradjuri Aboriginal Corporation Gallangabang Aboriginal Corporations	Megan Sheppard Brennand (EMM)	Brad Bliss	Phone	Phoned to determine availability of both Brad's corporations for the survey to be undertaken on 1st December. Left a message
22-Nov-21	Outgoing	Binjang Wellington Wiradjuri Heritage Survey	Megan Sheppard Brennand (EMM)	Jamie Grey	Phone	Phoned to determine availability of Jaime's corporation for the survey to be undertaken on 1st December. Jamie confirmed that he would have someone available for that date
22-Nov-21	Outgoing	Wellington Local Aboriginal Land Council (WLALC)	Megan Sheppard Brennand (EMM)	Reception	Phone	Phoned to determine availability of the WLALC for the survey to be undertaken on 1st December. Reception requested to be contacted via email and that following this email someone would determine availability
22-Nov-21	Outgoing	Binjang Wellington Wiradjuri Heritage Survey	Megan Sheppard Brennand (EMM)	Jamie Grey	Email	Emailed providing survey date (1st December) and requesting a response with availability. The contract and covid forms were also attached with a request for the site officer to get a covid test at least a day prior to the site inspection
22-Nov-21	Outgoing	Wellington Local Aboriginal Land Council (WLALC)	Megan Sheppard Brennand (EMM)	WLALC	Email	Emailed providing survey date (1st December) and requesting a response with availability. The contract and covid forms were also attached with a request for the site officer to get a covid test at least a day prior to the site inspection
22-Nov-21	Outgoing	Binjang Wellington Wiradjuri Heritage Survey	Megan Sheppard Brennand (EMM)	Jamie Grey	Email	Emailed providing survey date (1st December) and requesting a response with availability. The contract and covid forms were also attached with a request for the site officer to get a covid test at least a day prior to the site inspection

24-Nov-21	Outgoing	Wellington Local Aboriginal Land Council (WLALC)	Megan Sheppard Brennand (EMM)	Tara	Phone	Called WLALC and spoke to Tara enquiring if they received the email and their availability for the survey. Tara said they were available and would send an email through with the site officers information and would sign the contract and fill in the covid forms and acknowledged that a covid test was required. MSB said would send through more information tomorrow or Monday with meeting details once everything was confirmed.
24-Nov-21	Outgoing	Wellington Valley Wiradjuri Aboriginal Corporation Gallangabang Aboriginal Corporations	Megan Sheppard Brennand (EMM)	Brad Bliss	Phone	Phoned to determine availability of both Brad's corporations for the survey to be undertaken on 1st December. Brad said that he was very busy next week with a number of other jobs but was trying to find two site officers and would have the paperwork to us by Thursday or Friday
25-Nov-21	Outgoing	WLALC, Wellington Valley Wiradjuri Aboriginal Corporation, Gallangabang Aboriginal Corporations, Binjang Wellington Wiradjuri Heritage Survey	Georgia Burnett (EMM)	Various	Email	Followed up with meeting details regarding site inspection for Wednesday 1 December.
26-Nov-21	Incoming	Wellington Valley Wiradjuri Aboriginal Corporation Gallangabang Aboriginal Corporations	Megan Sheppard Brennand (EMM)	Brad Bliss	Email	Brad sent signed contracts through along with insurances and site officer details for the survey on 1st December. Site officer for WVVAC will be Brenda Waters, Brad has not found a site officer for Gallangabang yet
29-Nov-21	Outgoing	Binjang Wellington Wiradjuri Heritage Survey	Megan Sheppard Brennand (EMM)	Jamie Grey	Phone	Confirmed with Jamie that he would be attending the survey on 1st December and that he would send through the signed contract and his insurances by afternoon of 30th November. He confirmed that he had done a covid test today (29th November)
29-Nov-21	Outgoing	Wellington Local Aboriginal Land Council (WLALC)	Megan Sheppard Brennand (EMM)	NA	Phone	Called the WLALC to confirm their attendance for the survey and to request they send through the signed contract and insurances. No answer, left a voice message
01-Dec-21	Outgoing	Binjang Wellington Wiradjuri Heritage Survey, Wellington Valley Wiradjuri Aboriginal Corporation Gallangabang Aboriginal Corporations	Megan Sheppard Brennand and Georgia Burnett (EMM)	Various	Fieldwork	Undertook site inspection. WLALC did not attend and could not be reached via phone or email
09-Feb-22	Outgoing	All RAPs	Georgia Burnett (EMM)	Various	Email	Distributed draft ACHA for review and comment. Requested feedback provided by COB 9 March 2022.
07-Mar-22	Outgoing	All RAPs	Georgia Burnett (EMM)	Various	Email	Reminder for close of comments on ACHA on 9 March 2022.
07-Mar-22	Incoming	Wellington Valley Wiradjuri Aboriginal Corporation Gallangabang Aboriginal Corporations	Georgia Burnett (EMM)	Brad Bliss	Email	Commented on the draft ACHA (see appendix B.6)
31-Mar-22	Outgoing	Wellington Valley Wiradjuri Aboriginal Corporation Gallangabang Aboriginal Corporations	Megan Sheppard Brennand (EMM)	Brad Bliss	Email	Replied to Brad stating that WVVAC's comments and recommendations had been included in the draft ACHA and that a copy would be provided to them shortly
09-Sep-22	Outgoing	All RAPs	Georgia Burnett (EMM)		Email	Provided revised ACHA for comment (includes larger footprint in TransGrid substation). Requested comments by 5 October 2022.

B.2 List of identified Aboriginal stakeholders in the region

- Wellington Local Aboriginal Land Council
- Brian Draper
- Central West Catchment Management Authority
- Dubbo Aboriginal Community Working Party
- Katrina McKinnon
- Mooka
- Natasha Rodgers
- Paul Brydon
- Peter Peckham
- Trevor Robinson
- Wamarr Cultural Consultants
- Wellington Valley Wiradjuri Aboriginal Corporation
- Wiradjuri Interim Working Party
- Wirrimbah Direct Descendants
- David Smith
- Gary Smith
- Geoffrey Ryan
- Tubbagah Aboriginal Co-Op
- Raymond Thomas Smith
- William Smith

B.3 List of registered Aboriginal parties following notification

- Wellington Local Aboriginal Land Council
- Corroboree Aboriginal Corporation
- Woka Aboriginal Corporation
- Gallangabang Aboriginal Corporation
- Wellington Valley Wiradjuri Aboriginal Corporation
- Binjang Wellington Wiradjuri Heritage Survey

B.4 Stage 1 – Notification and registration

6 August 2021

Ground floor, 20 Chandos Street
St Leonards NSW 2065
PO Box 21
St Leonards NSW 1590

T 02 9493 9500

E info@emmconsulting.com.au

www.emmconsulting.com.au

Re: Wellington Battery Energy Storage Facility - Aboriginal cultural heritage assessment - Request for information on local Aboriginal stakeholders

Dear Sir/Madam,

EMM Consulting Pty Ltd (EMM) has been engaged by AMPYR Australia Pty Ltd (AMPYR) to undertake an Aboriginal Cultural Heritage Assessment for a proposed Battery Energy Storage System (BESS) to be constructed and operated at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP622471 and Lot 1 DP1226751). The specific details of the development are currently being developed, but would likely include clearing, levelling, and excavation to accommodate footings and cables. The aim of the assessment is to inform the cultural heritage of the impact footprint, and to develop suitable avoidance, management and/or mitigation measures to allow the works to proceed.

The contact on behalf of AMPYR for the development is: James North, Project Manager – BESS Development, 38 Young Street, Sydney NSW 2000, M: +61 456 596 745, E: james.north@ampyrenergy.com.

In accordance with NSW State government's *Aboriginal cultural heritage consultation requirements for proponents 2010*, I am writing to you to seek information on relevant Aboriginal individuals and/or communities that you are aware of in the region, and who may hold cultural knowledge and/or information about Aboriginal objects and sites in the vicinity. Could you please provide me with this information at gburnett@emmconsulting.com.au.

I would be appreciative of your response by **20 August 2021**. Please advise us at your earliest convenience if additional time is required to provide this information. Information received after the requested date might not be considered in the consultation process due to the assessment timeframe.

If you have any questions or enquiries, please don't hesitate to contact me on 02 9493 9500.

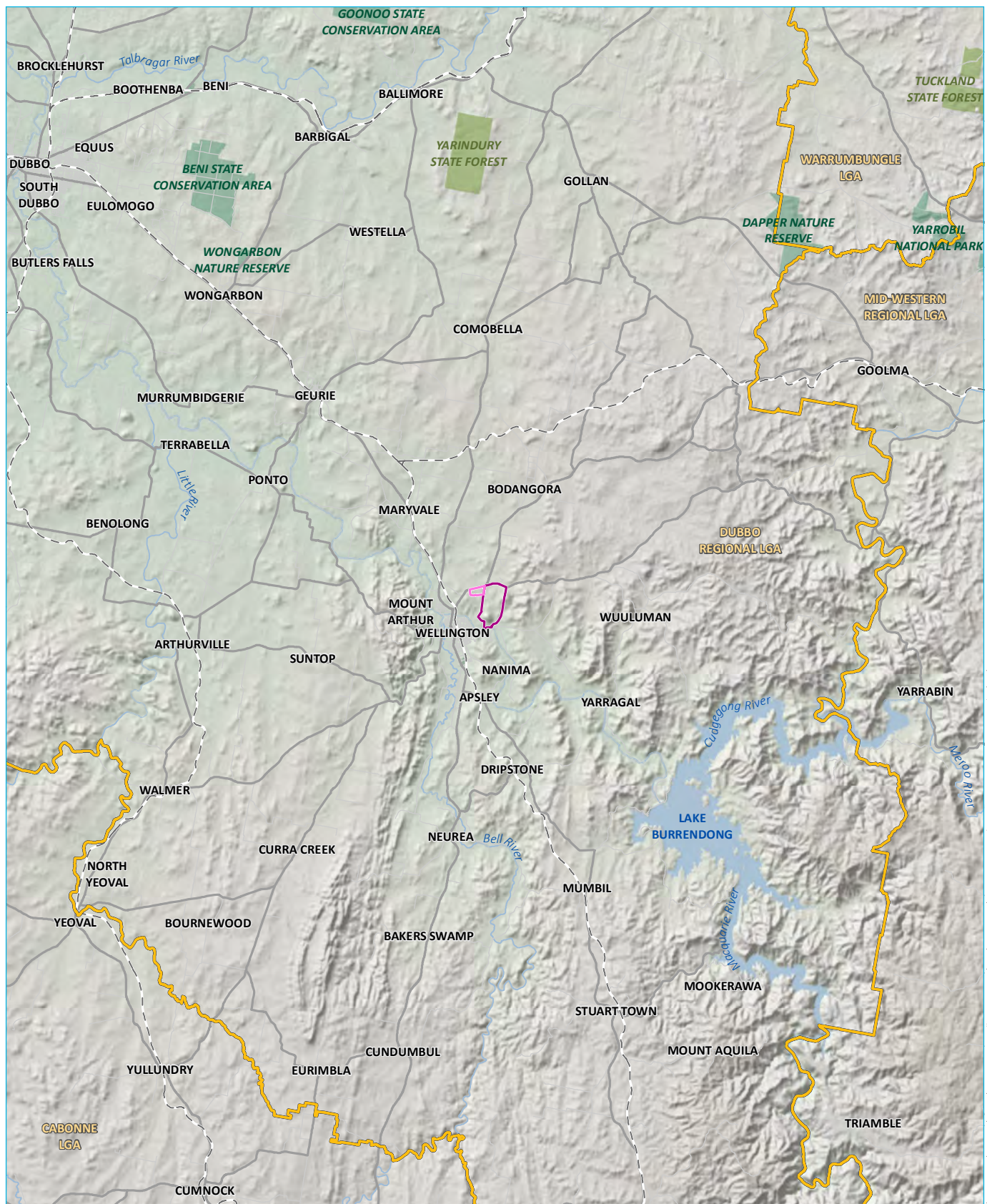
Yours sincerely



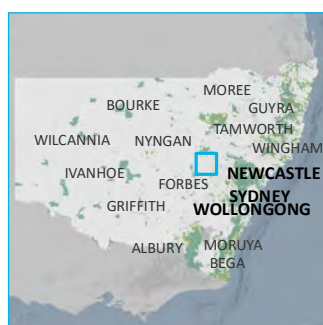
Georgia Burnett

Archaeologist

gburnett@emmconsulting.com.au



Source: EMM (2021); DFSI (2017); GA (2011); ASGC (2006)



KEY

- Study area
- Wellington substation site
- Rail line
- Major road
- Minor road
- River
- Named waterbody
- Local government area

- NPWS reserve
- State forest

Regional setting

Wellington Battery Energy Storage System
Historic heritage constraints report
Figure 1.1



DRAFT

Megan Sheppard Brennand

From: LLS GS Service Mailbox <gs.service@lls.nsw.gov.au>
Sent: Friday, 6 August 2021 10:29 AM
To: Cameron Neal
Subject: Re: Wellington Battery Energy Storage Facility - Aboriginal cultural heritage assessment - Request for Aboriginal stakeholder information

CAUTION: This email originated outside of the Organisation.

Dear Ms Burnett

Thank you for your recent letter seeking assistance to identify Aboriginal stakeholder organisations and persons who may hold an interest in Country at the project area designated in your correspondence.

Greater Sydney Local Land Services (GS LLS) acknowledges that Local Land Services (formerly as Catchment Management Authorities) has been listed in Section 4.1.3.(g) of the Aboriginal Cultural Heritage Consultation requirements for proponents 2010, to support Part 6, of the NSW National Parks and Wildlife Act 1974 as a source of information to obtain the 'names of Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places'.

GS LLS understands and respects the significant role and values that tangible and intangible Aboriginal Cultural Heritage holds for First Nations/Aboriginal people with Country. GS LLS also partners with many First Nations communities on Caring for Country projects that aim to protect and enhance those tangible and intangible values in Country including Aboriginal Cultural Heritage. GS LLS considers Aboriginal Cultural Heritage matters in relation to its role in land management and considers cultural heritage issues in the context of Natural Resource Management.

However, GS LLS feels that it is not a primary source of contact for First Nations (Aboriginal) communities or persons that may inform or provide comment on development or planning issues.

GS LLS strongly recommends you contact Heritage NSW to seek their advice on all-inclusive contact lists of persons and organisations who 'speak for Country' and that may assist with your investigation.

Regards

Customer Service Team

Greater Sydney Local Land Services

Level 4, 2 - 6 Station St Penrith | PO Box 4515, Westfield Penrith NSW 2750

T: 02 4724 2100

E: gs.service@lls.nsw.gov.au | **W:** www.greatersydney.lls.nsw.gov.au

You can also contact us through our [online enquiry form](#)

Greater Sydney Local Land Services acknowledges we operate in and deliver services throughout Country of First Nations people in the Greater Sydney Region.

We recognise and respect Elders and cultural knowledge holders, past and present, while acknowledging the unique and diverse enduring cultures and histories of all First Nations people.

Always was and always will be Aboriginal land.



From: Cameron Neal <cneal@emmconsulting.com.au>

Sent: Friday, 6 August 2021 9:14 AM

To: OEH HD Heritage Mailbox <HERITAGEMailbox@environment.nsw.gov.au>; LLS GS Service Mailbox <gs.service@lls.nsw.gov.au>; information@ntscorp.com.au <information@ntscorp.com.au>; OLG - Dubbo Regional Council <council@dubbo.nsw.gov.au>

Cc: Georgia Burnett <gburnett@emmconsulting.com.au>

Subject: Wellington Battery Energy Storage Facility - Aboriginal cultural heritage assessment - Request for Aboriginal stakeholder information

Dear Sir/Madam,

EMM Consulting Pty Ltd (EMM) has been engaged by AMPYR Australia Pty Ltd (AMPYR) to undertake an Aboriginal Cultural Heritage Assessment for a proposed Battery Energy Storage System (BESS) to be constructed and operated at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP622471 and Lot 1 DP1226751).

In accordance with NSW State government's *Aboriginal cultural heritage consultation requirements for proponents 2010*, I am writing to you to seek information on relevant Aboriginal individuals and/or communities that you are aware of in the region, and who may hold cultural knowledge and/or information about Aboriginal objects and sites in the vicinity (see attached letter).

Please contact myself or Georgia Burnett (cc'd here) with any questions.

Kind regards,
Cameron

Cameron Neal

Archaeologist

Bushfire, Ecology, Heritage and Spatial Solutions



SYDNEY | Ground floor, 20 Chandos Street, St Leonards NSW 2065

T 02 9493 9500

M 0459 326 362

www.emmconsulting.com.au

Megan Sheppard Brennand

From: Geospatial Search Requests <GeospatialSearch@NNTT.gov.au>
Sent: Monday, 9 August 2021 2:17 PM
To: Cameron Neal
Cc: Georgia Burnett
Subject: RE: SR21/1220 - Wellington Battery Energy Storage Facility - Aboriginal cultural heritage assessment - Request for Aboriginal stakeholder information - SR21/1220

CAUTION: This email originated outside of the Organisation.

UNCLASSIFIED

Native title search – NSW Parcel – Lot 32 on DP622471 & Lot 1 on DP1226751
Your ref: J210534 - Our ref: SR21/1220

Dear Cameron Neal,

Thank you for your search request received on 06 August 2021 in relation to the above area. Based on the records held by the National Native Title Tribunal as at 06 August 2021 it would appear that there are no Native Title Determination Applications, Determinations of Native Title, or Indigenous Land Use Agreements over the identified area.

Search Results

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

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

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

Cadastral data as at: 01/02/2021)

Parcel ID	Feature Area SqKm	Overlapping Native Title Feature			
		Tenure	NNTT File Number	Name	Catego
1//DP1226751	0.5688	FREEHOLD	No overlap		
32//DP622471	4.5721	Tenure	NNTT File Number	Name	Catego
		FREEHOLD	No overlap		

For more information about the Tribunal's registers or to search the registers yourself and obtain copies of relevant register extracts, please visit our [website](#).

Information on native title claims and freehold land can also be found on the Tribunal's website here: [Native title claims and freehold land](#).

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

The search results are based on analysis against external boundaries of applications only. Native title applications commonly contain exclusions clauses which remove areas from within the external boundary. To determine whether the areas described are in fact subject to claim, you need to refer to the "Area covered by claim" section of the relevant Register Extract or Schedule Extract and any maps attached.

Search results and the existence of native title

Please note that the enclosed information from the Register of Native Title Claims and/or the Schedule of Applications is **not** confirmation of the existence of native title in this area. This cannot be confirmed until the Federal Court makes a determination that native title does or does not exist in relation to the area. Such determinations are registered on the National Native Title Register.

The Tribunal accepts no liability for reliance placed on enclosed information

The enclosed information has been provided in good faith. Use of this information is at your sole risk. The National Native Title Tribunal makes no representation, either express or implied, as to the accuracy or suitability of the information enclosed for any particular purpose and accepts no liability for use of the information or reliance placed on it.

Cultural Heritage Searches in NSW

The National Native Title Tribunal (the Tribunal) has undertaken steps to remove itself from the formal list of sources for information about indigenous groups in development areas. The existence or otherwise of native title is quite separate to any matters relating to Aboriginal cultural heritage. Information on native title claims, native title determinations and Indigenous Land Use Agreements is available on the Tribunal's website.

Interested parties are invited to use Native Title Vision (NTV) the Tribunal's online mapping system to discover native title matters in their area of interest. Access to NTV is available at

<http://www.nntt.gov.au/assistance/Geospatial/Pages/NTV.aspx>

Training and self-help documents are available on the NTV web page under "Training and help documents". For additional assistance or general advice on NTV please contact GeospatialSearch@NNTT.gov.au

Additional information can be extracted from the Registers available at

<http://www.nntt.gov.au/searchRegApps/Pages/default.aspx>

If you have any further queries, please do not hesitate to contact us via GeospatialSearch@NNTT.gov.au

Regards,

Geospatial Searches

National Native Title Tribunal | Perth

Email: GeospatialSearch@nntt.gov.au | www.nntt.gov.au

From: Cameron Neal <cneal@emmconsulting.com.au>

Sent: Friday, 6 August 2021 7:51 AM

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

Cc: Georgia Burnett <gburnett@emmconsulting.com.au>

Subject: SR21/1220 - Wellington Battery Energy Storage Facility - Aboriginal cultural heritage assessment - Request for Aboriginal stakeholder information

Caution: This is an external email. DO NOT click links or open attachments unless you recognise the sender and know the content is safe.

Dear Sir/Madam,

EMM Consulting Pty Ltd (EMM) has been engaged by AMPYR Australia Pty Ltd (AMPYR) to undertake an Aboriginal Cultural Heritage Assessment for a proposed Battery Energy Storage System (BESS) to be constructed and operated at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP622471 and Lot 1 DP1226751).

I acknowledge your terms and conditions relating to cultural heritage in NSW, although a search of the Native Title Tribunal is required under NSW State government's *Aboriginal cultural heritage consultation requirements for proponents 2010*. Therefore, I am obligated to request information on relevant Aboriginal individuals and/or communities that you are aware of in the region, and who may hold cultural knowledge and/or information about Aboriginal objects and sites in the vicinity. Apologies for any inconvenience.

Please contact myself or Georgia Burnett (cc'd here) with any questions.

Kind regards,
Cameron

Cameron Neal

Archaeologist

Bushfire, Ecology, Heritage and Spatial Solutions



SYDNEY | Ground floor, 20 Chandos Street, St Leonards NSW 2065

T 02 9493 9500

M 0459 326 362

www.emmconsulting.com.au

Georgia Burnett
EMM Consulting Pty Ltd
PO Box 21
St Lenora NSW 1590
gburnett@emmconsulting.com.au

RE: Request for information on Aboriginal stakeholders for an Aboriginal cultural heritage assessment for proposed “Wellington Battery Energy Storage Facility, Wellington, NSW”

Dear Georgia,

Thank you for your letter of 6 August 2021 about Aboriginal cultural heritage consultation for the proposed “Wellington Battery Energy Storage Facility, Wellington, NSW”, within the Dubbo Regional local government areas. I appreciate the opportunity to provide input.

Please find enclosed a list of known Aboriginal parties for the Dubbo Regional 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 paul.houston@environment.nsw.gov.au or 02 68835361.

Yours sincerely

A handwritten signature in dark ink, appearing to read 'Paul Houston', with a stylized flourish at the end.

Paul Houston
Aboriginal Heritage Planning Officer
Aboriginal Cultural Heritage Regulation - Northern
Heritage NSW
Department of Premier and Cabinet
19 August 2021

Megan Sheppard Brennand

From: Paul Houston <Paul.Houston@environment.nsw.gov.au>
Sent: Thursday, 19 August 2021 10:42 AM
To: Georgia Burnett
Subject: RAP letter for proposed "Wellington Battery Energy Storage Facility, Wellington, NSW"
Attachments: DOC21-674155-1 Wellington Battery Energy Storage Facility.pdf
Importance: High

CAUTION: This email originated outside of the Organisation.

Georgia

Please see attached RAP letter for proposed "Wellington Battery Energy Storage Facility, Wellington, NSW".

Sorry about the delay.

If you have any questions please contact me.

Thanxs
Paul

Paul Houston, Aboriginal Heritage Planning Officer
Heritage NSW, Community Engagement, Department of Premier and Cabinet
142 Brisbane St, Dubbo NSW 2830
T: 02 68835361, M: 0427832205 | Paul.Houston@environment.nsw.gov.au

Please lodge all Applications to Heritagemailbox@environment.nsw.gov.au

I acknowledge and respect the traditional custodians and ancestors of the lands I work across.

Heritage NSW and coronavirus (COVID-19)

Heritage NSW has taken steps to protect the safety, health and wellbeing of our staff, communities and customers. Whilst our offices remain open, we have put in place flexible working arrangements for our teams across NSW and continue to adapt our working arrangements as necessary. Face-to-face meetings and field work/site visits with our customers are subject to rules on gatherings and social distancing measures. We thank you for your patience and understanding at this time.

This email is intended for the addressee(s) named and may contain confidential and/or privileged information. If you are not the intended recipient, please notify the sender and then delete it immediately. Any views expressed in this email are those of the individual sender except where the sender expressly and with authority states them to be the views of the NSW Office of Environment, Energy and Science.

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

31 August 2021

Ground floor, 20 Chandos Street
St Leonards NSW 2065
PO Box 21
St Leonards NSW 1590

T 02 9493 9500

E info@emmconsulting.com.au

www.emmconsulting.com.au

Re: Invitation for Registrations of Interest – Aboriginal Cultural Heritage – Wellington Battery Energy Storage System

Dear Sir/Madam,

EMM Consulting Pty Ltd (EMM) has been engaged by AMPYR Australia Pty Ltd (AMPYR) (the proponent) to undertake an Aboriginal Cultural Heritage Assessment for a proposed Battery Energy Storage System (BESS) to be constructed and operated at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP622471 and Lot 1 DP 1226751). The specific details of the development are currently being developed, but would likely include clearing, levelling, and excavation to accommodate footings and cables. The location of the project is shown on the attached figure.

The contact on behalf of AMPYR for the development is: James North, Project Manager – BESS Development, AMPYR Australia Pty Ltd, 38 Young Street, Sydney NSW 2000, M: +61 456 596 745, E: james.north@ampyrenergy.com

This project is being undertaken in accordance with NSW State government's *Aboriginal cultural heritage consultation requirements for proponents 2010*. As per the first stage of the NSW State government consultation guidelines, I am writing to notify you of the project and seeking you and/or your organisation's interest in being registered for subsequent consultation and involvement.

We are interested in Aboriginal individuals and/or organisations who may hold relevant cultural knowledge for determining the Aboriginal cultural heritage of the area, and who wish to be involved in the project.

The purpose of consultation is to assist the proponent to:

1. Assess the Aboriginal heritage values of the area.
2. Assist Heritage NSW in the assessment of Aboriginal heritage reports prepared for this project.
3. Support any future applications or approvals for the project sought under *Environmental Planning and Assessment Act 1979* and/or *National Parks and Wildlife Act 1974*.

If you wish to register your interest as an Aboriginal party your registration must be in writing (letter or email). This information must be received by Georgia Burnett (see contact details below) by close of business **15 September 2021**.

Georgia Burnett, EMM Consulting Pty Ltd, 20 Chandos Street, St Leonards, NSW 2065; T: 02 9493 9500; E: gburnett@emmconsulting.com.au

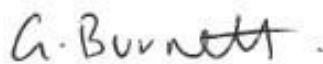
In your response, please provide the following information:

- clear identification of the individual and/or organisation registering an interest. Please ensure all contact details and personal, along with relevant phone, address and e-mail (if available) is provided;
- preferred communication method (e.g. e-mail) during the consultation of this project, along with your organisation's nominated contact person and their details;
- the level of project involvement you or your organisation wishes, including attendance of meetings, fieldwork participation and/or simply reviewing documentation;
- identification on any procedures, protocols or requirements for the use and reproduction of any cultural information or materials you or your organisation provides EMM Heritage as part of this project; and
- identification of any Aboriginal objects, sites and/or areas of cultural value that you are aware of in, or near, the project area.

As required by the consultation guidelines, details of people registering as Aboriginal Parties will be forwarded to Heritage NSW and the relevant Local Aboriginal Land Council unless you specify otherwise in your response.

If you have any questions or enquiries, please don't hesitate to contact us.

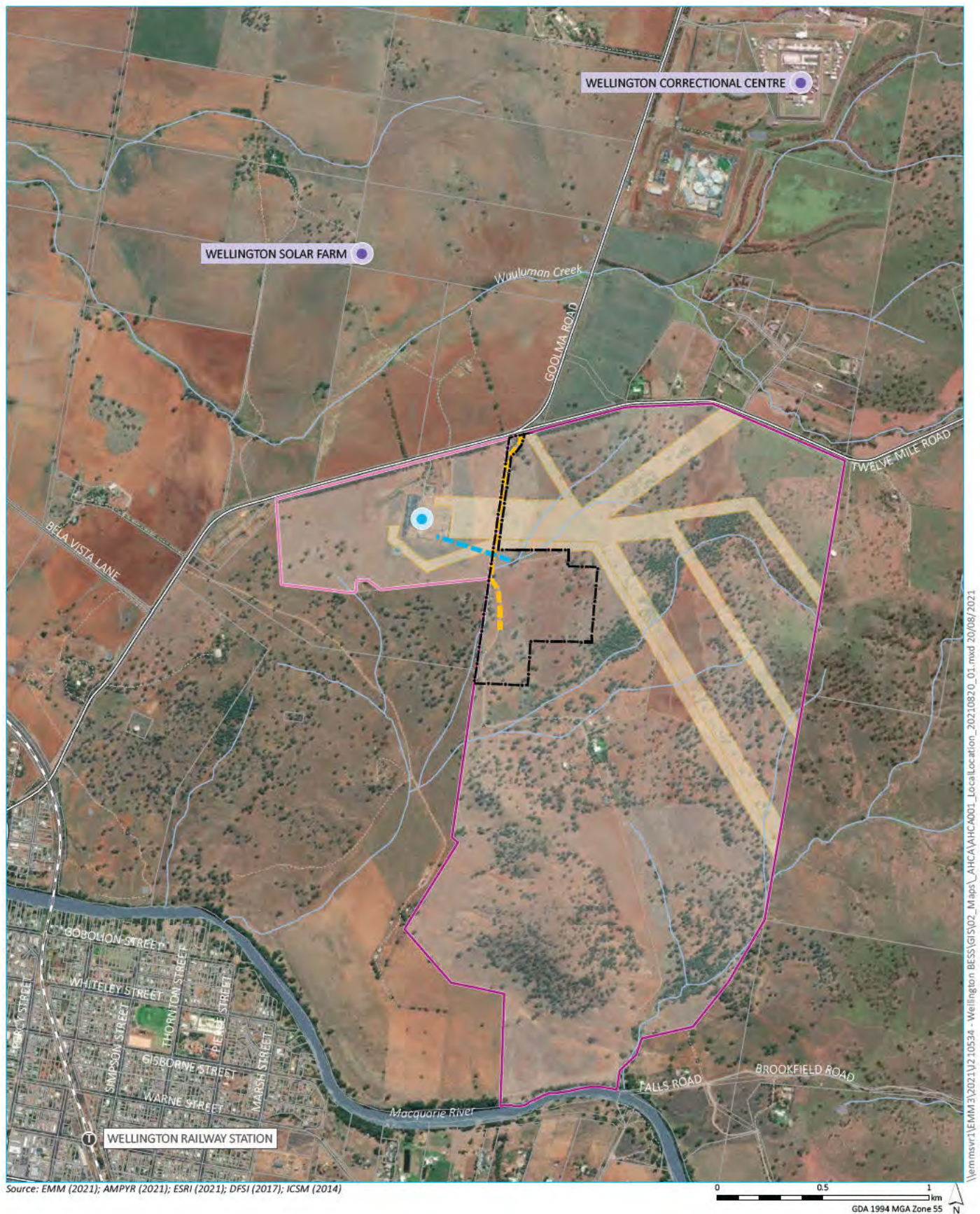
Yours sincerely



Georgia Burnett

Archaeologist

gburnett@emmconsulting.com.au



KEY

Proposed project infrastructure

- Project area
- Development footprint
- Site access
- Preliminary connection
- Existing infrastructure
- Wellington substation (TransGrid)
- Wellington substation site
- Freehold easement

Other site features

- Train station
- Rail line
- Major road
- Minor road
- Vehicular track
- Watercourse/drainage line
- Waterbody
- Cadastral boundary

Local setting

Wellington Battery Energy Storage Facility
Aboriginal stakeholder consultation

Figure 1.1

Connect with Classifieds

Liberal
Daily

Phone: 02 6883 2900
classifieds@dailyliberal.com.au



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Self Service

Death Notices

Mary Ann Clarke

Late of Dubbo

Passed away 27th August 2021

Aged 88 years

Beloved wife of Mac (dec).

Loving mother of Joanne & Richard.

A private family service will be held.

Funeral arrangements are in the caring hands of

W. Larcombe & Son

Dubbo's Premier Funeral Home

FDA Approved

(02) 6882 3199

Sharda Gupta

Late of Dubbo

Passed away 20th August 2021

Aged 32 years

Much loved wife of Abhishek.

Loved daughter, daughter-in-law, sister
& friend to many.

A private family service will be held.

Funeral arrangements are in the caring hands of

W. Larcombe & Son

Dubbo's Premier Funeral Home

FDA Approved

(02) 6882 3199

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Public Notices

GENERAL PRACTITIONER & FAMILY DOCTOR DR FAIZUNNESA BHUIYA

Would like to announce that she is currently
taking new patients. Bulk Billing is provided.

For an appointment please contact Reception at

Gumtree Medical Practice

55 North Street, Dubbo

Phone: 6885 1559



Dubbo Neighbourhood Centre Inc trading as Connecting Community Services SPECIAL MEMBER MEETING

To be held via teams online meeting
Tuesday 28 September 2021, 4:00pm

Members are invited to attend for the meeting.

RSVP - Please call 02 6883 2300 or

email: info@dnc.org.au



Invitation for Registrations of Interest - Aboriginal Cultural Heritage Assessment - Wellington Battery Energy Storage System

EMM Consulting Pty Ltd (EMM) has been
engaged by AMPYR Australia Pty Ltd (AMPYR)
(the proponent) to undertake an Aboriginal
Cultural Heritage Assessment (ACHA) for a
proposed Battery Energy Storage System
(BESS) to be constructed and operated at 6773
Goolma Road, Wuuluman NSW 2820 (Lot 32
DP622471 and Lot 1 DP1226751).

The contact on behalf of AMPYR Energy for the
development is: James North, Project Manager
- BESS Development, AMPYR Australia Pty
Ltd, 38 Young Street, Sydney NSW 2000, M:
+61 456 596 745, E: james.north@ampyrenergy.
com

Registrations are invited from Aboriginal
individuals and organisations who hold
cultural knowledge relevant to determining
the significance of Aboriginal objects and/or
places in the area, and who wish to be involved
in the consultation process undertaken as part
of the assessment.

The purpose of consultation is to: 1) assist
the proponent in assessing the Aboriginal
heritage values of the area; 2) assist the NSW
Government in the assessment of Aboriginal
heritage reports prepared for this project; and
3) support any future applications or approvals
for the project sought under Environmental
Planning and Assessment Act 1979 and/or
National Parks and Wildlife Act 1974.

Registrations of interest should be provided by
no later than Wednesday 15 September 2021 to
Georgia Burnett,

EMM Consulting Pty Ltd,

20 Chandos Street,

St Leonards NSW 2065;

T: 02 9493 9500;

E: gburnett@emmconsulting.com.au.



Tenders



ORANGE PRESCHOOL
kindergarten

■ Expression of Interest ■

Alterations and Additions to Orange
Pre-school and Kindergarten - 13 Moad
St, Orange

Orange Pre-school and Kindergarten is seeking
expressions of interest from suitably qualified
building companies to undertake major
alterations and additions to their facility.

Works are programmed to be undertaken in the
period December 2021 - May 2022 and are to
be staged to ensure minimum impact on the
users.

All submissions should include the following
details (as failure to do so may result in the
submission not being considered):

- Company contact details
- Relevant references and company profile
- Detail of recent similar projects (last 2 years)
- Evidence of current Public Liability & Workers
Compensation insurance

Interested parties are requested to email their
submissions to: madams@calare.civil.com.au

The closing time and date for submissions is
2.00pm on Thursday, 9th September 2021.

If you experience difficulties in submitting or
have any questions about the project, please
feel free to contact

Mark Adams - mob 0409 715 614.

Positions Vacant

Clerical Officer (Office Administration)

Full Time Position - Salary (Based on Experience)

Applications to:

Brownrite Building Group Pty Ltd

Email: brownrite@hwy.com.au

42 Mountbatten Drive Dubbo NSW 2830

St Johns College, Dubbo

Co-educational School Years 7 - 12
Current enrolment of 905 students

Coordinator Level 2 Position Diverse Needs Leader

Full Time Permanent Position

Commencing 28.01.2022

Applications are invited for the above position
from qualified leaders who demonstrate a
sincere commitment to the aims and philosophy
of Catholic education.

We are inviting applicants with expertise in one
or more KLA areas to apply and applicants who
are prepared to teach across two faculties will
be highly regarded.

Further details of this position including the
selection criteria may be obtained by contacting
Diana Mastronardi, Principal's Personal Assistant,
via email at d.mastronardi@bth.catholic.edu.au

Applicants are required to complete an on-line
application which is available from the CEDB
website at www.bth.catholic.edu.au

Applications close: 7 September 2021 at 9am

Interviews will be held: 9 September 2021

Child Protection legislation requires preferred
applicants to be subject to employment screening.

The Catholic Education Diocese of Bathurst is an
equal opportunity employer.

Positions Vacant

St Johns College, Dubbo

Co-educational School Years 7 - 12
Current enrolment of 905 students

Coordinator Level 3 Position Leader of Pastoral Care

Full Time Permanent Position

Commencing 28.01.2022

Applications are invited for the above position
from qualified leaders who demonstrate a
sincere commitment to the aims and philosophy
of Catholic education.

Further details of this position including the
selection criteria may be obtained by contacting
Diana Mastronardi, Principal's Personal Assistant,
via email at d.mastronardi@bth.catholic.edu.au

Applicants are required to complete an on-line
application which is available from the CEDB
website at www.bth.catholic.edu.au

Applications close:

Sunday 12 September 2021 at 9am

Interviews will be held:

Wednesday 15 September 2021

Child Protection legislation requires preferred
applicants to be subject to employment screening.

The Catholic Education Diocese of Bathurst is an
equal opportunity employer.

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Megan Sheppard Brennand

From: [REDACTED]
Sent: Thursday, 2 September 2021 9:27 AM
To: Georgia Burnett
Subject: Re: Expressing Interest- Wellington Battery Energy Storage Facility - ACHA - Invitation to Register Interest

CAUTION: This email originated outside of the Organisation.

Dear Georgia

Please register [REDACTED] We have worked on projects as Cultural Heritage Officers in the surrounding areas of the project. My uncle lived in the area and other family members currently reside in the surrounding areas. We are registering in a full capacity. We are aboriginal people who are culturally & heritage aware. We have the necessary ability, experience, skills, insight and the knowledge to identify artefacts on field work. And as Aboriginal People we connect thru the land, thru our ancestors and our heritage. Therefore we are able participate on all levels. We have worked with many archaeologists across a broad landscape. We have consulted with most archeological companies over many years on projects. We have all the relevant insurances and safety gear. We are all fit, capable and adapt to a vast landscape.
Contact is preferred via email: [REDACTED]. The contact number, email and contact person is also listed in the signature.

Please do not disclose any of our details to LALC. We have responded for inclusion, to participate on all levels.
Thanks.

Kind regards
[REDACTED]

Director
[REDACTED]

On 31 Aug 2021, at 12:29 pm, Cameron Neal <cneal@emmconsulting.com.au> wrote:

Hi All,

AMPYR Australia Pty Ltd are proposing to construct a new Battery Energy Storage Facility (BESS) at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP 622471 and Lot 1 DP 1226751). Specific details of the project are currently being developed but would involve ground disturbances. EMM Consulting has been engaged by AMPYR Australia to undertake an Aboriginal Cultural Heritage Assessment which will identify the presence of Aboriginal heritage values and develop strategies to minimise impacts to Aboriginal heritage.

You or your organisation has been identified as a potential stakeholder in the area, and in accordance with Heritage NSW consultation guidelines, we are seeking registrations of interest in the project (please see attached document).

If you'd like to be involved in the project, please get in touch with Georgia Burnett (gburnett@emmconsulting.com.au) to provide a registration of interest by no later than **COB Wednesday 15 September 2021**.

Likewise if you have any questions please don't hesitate to ask.

Kind regards
Cameron

Cameron Neal

Archaeologist
Bushfire, Ecology, Heritage and Spatial Solutions

[<image001.png>](#)

SYDNEY | Ground floor, 20 Chandos Street, St Leonards NSW 2065

T 02 9493 9500

M 0459 326 362

www.emmconsulting.com.au

I work flexibly. I'm sending you this message now because it's a good time for me, but do not expect you to read, respond or action it outside your regular hours

<J210534_WellingtonBESS_Invitation to register.pdf>

Megan Sheppard Brennand

From: [REDACTED]
Sent: Thursday, 2 September 2021 9:33 AM
To: Georgia Burnett
Subject: Fw: Registrations of Interest – Aboriginal Cultural Heritage – Wellington Battery Energy Storage System

CAUTION: This email originated outside of the Organisation.

We respectfully acknowledge the Traditional Owners of the lands upon which we work and pay our deep respect to Elders past, present and emerging.

Megan Sheppard Brennand

From: WVVAC Contact Officer [REDACTED]
Sent: Wednesday, 6 October 2021 11:45 AM
To: Cameron Neal
Cc: Georgia Burnett
Subject: RE: Wellington Battery Energy Storage Facility - ACHA - Invitation to Register Interest

CAUTION: This email originated outside of the Organisation.

Hi Cameron,

Fairly sure that I have already discussed this project with you and registered the interest of Wellington Valley Wiradjuri Aboriginal Corporation (WVVAC) and [REDACTED].

If not please register the two different organisations as Registered Aboriginal Parties.

Regards,

Bradley R. Bliss J.P.
WVVAC CEO and Contact Officer
[REDACTED]
Senior Aboriginal Cultural Heritage Field Officer
Senior Aboriginal Cultural Mentor and Educator
[REDACTED]

Sent from [Mail](#) for Windows 10

From: [Cameron Neal](#)
Sent: Wednesday, 15 September 2021 1:51 PM
To: wwwac@hotmail.com
Cc: [Georgia Burnett](#)
Subject: Wellington Battery Energy Storage Facility - ACHA - Invitation to Register Interest

Good afternoon,

I am writing to you to seek a registration of interest for an Aboriginal Cultural Heritage Assessment (ACHA) EMM Consulting is undertaking near Wellington, NSW. I tried to call your office earlier but it appears the number is not connected.

AMPYR Australia Pty Ltd are proposing to construct a new Battery Energy Storage Facility (BESS) at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP 622471 and Lot 1 DP 1226751). Specific details of the project are currently being developed but would involve ground disturbances. EMM Consulting has been engaged by AMPYR Australia to undertake an ACHA which will identify the presence of Aboriginal heritage values and develop strategies to minimise impacts to Aboriginal heritage.

Your organisation has been identified as a potential stakeholder in the area, and in accordance with Heritage NSW consultation guidelines, we are seeking registrations of interest in the project (please see attached document).

If you'd like to be involved in the project, please get in touch with myself or Georgia Burnett (gburnett@emmconsulting.com.au) to provide a registration of interest as soon as possible.

Likewise if you have any questions please don't hesitate to ask.

Kind regards
Cameron

Cameron Neal

Archaeologist

Bushfire, Ecology, Heritage and Spatial Solutions



SYDNEY | Ground floor, 20 Chandos Street, St Leonards NSW 2065

T 02 9493 9500

M 0459 326 362

www.emmconsulting.com.au

I work flexibly. I'm sending you this message now because it's a good time for me, but do not expect you to read, respond or action it outside your regular hours

16 November 2021

Heritage NSW, Department of Premier and Cabinet
Level 6, 10 Valentine Avenue
Parramatta NSW 2124

Ground floor, 20 Chandos Street
St Leonards NSW 2065
PO Box 21
St Leonards NSW 1590

T 02 9493 9500
E info@emmconsulting.com.au
www.emmconsulting.com.au

Re: Notification of registered Aboriginal parties - Wellington Battery Energy Storage System

Dear Sir/Madam,

EMM Consulting Pty Ltd (EMM) has been engaged by AMPYR Australia Pty Ltd (AMPYR) (the proponent) to undertake an Aboriginal Cultural Heritage Assessment for a proposed Battery Energy Storage System (BESS) to be constructed and operated at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP622471 and Lot 1 DP 1226751). The specific details of the development are currently being developed, but would likely include clearing, levelling, and excavation to accommodate footings and cables.

We are implementing the *Aboriginal cultural heritage consultation for requirements for proponents 2010*. In accordance with 4.1.6 of those requirements, we are providing a list of the six Aboriginal parties who have registered for consultation on the project; three groups have requested their information be withheld and therefore their information has been redacted.

As per the consultation requirements, the Registered Aboriginal Parties can be found in Table 1 and the forms of notification are attached to this letter.

Table 1 List of Registered Aboriginal Parties for the Wellington BESS project, Wellington NSW.

Organisation	Contact
Binjang Wellington Wiradjuri Heritage Survey	Jamie Grey
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
Wellington Local Aboriginal Land Council	CEO
Wellington Valley Wiradjuri Aboriginal Corporation	Brad Bliss
[REDACTED]	[REDACTED]

If you require further information, please do not hesitate to contact me.

Yours sincerely

A handwritten signature in black ink, reading 'C. Neal' in a cursive style.

Cameron Neal

Archaeologist

cneal@emmconsulting.com.au



EMM
creating opportunities

**Invitation for Registrations of Interest –
Aboriginal Cultural Heritage Assessment
– Huntingwood Data Centre, Blacktown
LGA.**

LEHR Consultants International (Australia) Pty Ltd is proposing the installation of a data centre at 6 Honeman Close, Huntingwood, NSW (Lot 5 DP 1238504). EMM is undertaking an Aboriginal cultural heritage assessment to inform the activity.

Contact details for the project are:
Shi-En Lim, LEHR Consultants International (Australia)
A: Level 4, 73 Walker Street, North Sydney, NSW 2060; T: 02 9157 0570; E: Shi-En.Lim@lciconsultants.com.au

Registrations are invited from Aboriginal individuals and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places in the area, and who wish to be involved in the consultation process undertaken as part of the assessment.

The purpose of consultation is to assist the proponent in: 1) assessing the Aboriginal heritage values of the area; 2) to assist NSW Government in the assessment of Aboriginal heritage reports prepared for this project; and 3) to support any future applications or approvals for the project sought under Environmental Planning and Assessment Act 1979 and/or National Parks and Wildlife Act 1974.

Registrations of interest should be provided by no later than 11 August 2021 to Alan Williams, EMM Consulting Pty Ltd, 20 Chandos Street, St Leonards, NSW 2065; T: 02 9493 9500; E: awilliams@emmconsulting.com.au

Plate 1 Newspaper advertisement placed in the *District Reporter* on 19 July 2021.

31 August 2021

Ground floor, 20 Chandos Street
St Leonards NSW 2065
PO Box 21
St Leonards NSW 1590

T 02 9493 9500

E info@emmconsulting.com.au

www.emmconsulting.com.au

Re: Invitation for Registrations of Interest – Aboriginal Cultural Heritage – Wellington Battery Energy Storage System

Dear Sir/Madam,

EMM Consulting Pty Ltd (EMM) has been engaged by AMPYR Australia Pty Ltd (AMPYR) (the proponent) to undertake an Aboriginal Cultural Heritage Assessment for a proposed Battery Energy Storage System (BESS) to be constructed and operated at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP622471 and Lot 1 DP 1226751). The specific details of the development are currently being developed, but would likely include clearing, levelling, and excavation to accommodate footings and cables. The location of the project is shown on the attached figure.

The contact on behalf of AMPYR for the development is: James North, Project Manager – BESS Development, AMPYR Australia Pty Ltd, 38 Young Street, Sydney NSW 2000, M: +61 456 596 745, E: james.north@ampyrenergy.com

This project is being undertaken in accordance with NSW State government's *Aboriginal cultural heritage consultation requirements for proponents 2010*. As per the first stage of the NSW State government consultation guidelines, I am writing to notify you of the project and seeking you and/or your organisation's interest in being registered for subsequent consultation and involvement.

We are interested in Aboriginal individuals and/or organisations who may hold relevant cultural knowledge for determining the Aboriginal cultural heritage of the area, and who wish to be involved in the project.

The purpose of consultation is to assist the proponent to:

1. Assess the Aboriginal heritage values of the area.
2. Assist Heritage NSW in the assessment of Aboriginal heritage reports prepared for this project.
3. Support any future applications or approvals for the project sought under *Environmental Planning and Assessment Act 1979* and/or *National Parks and Wildlife Act 1974*.

If you wish to register your interest as an Aboriginal party your registration must be in writing (letter or email). This information must be received by Georgia Burnett (see contact details below) by close of business **15 September 2021**.

Georgia Burnett, EMM Consulting Pty Ltd, 20 Chandos Street, St Leonards, NSW 2065; T: 02 9493 9500; E: gburnett@emmconsulting.com.au

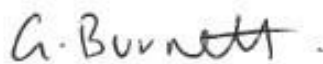
In your response, please provide the following information:

- clear identification of the individual and/or organisation registering an interest. Please ensure all contact details and personal, along with relevant phone, address and e-mail (if available) is provided;
- preferred communication method (e.g. e-mail) during the consultation of this project, along with your organisation's nominated contact person and their details;
- the level of project involvement you or your organisation wishes, including attendance of meetings, fieldwork participation and/or simply reviewing documentation;
- identification on any procedures, protocols or requirements for the use and reproduction of any cultural information or materials you or your organisation provides EMM Heritage as part of this project; and
- identification of any Aboriginal objects, sites and/or areas of cultural value that you are aware of in, or near, the project area.

As required by the consultation guidelines, details of people registering as Aboriginal Parties will be forwarded to Heritage NSW and the relevant Local Aboriginal Land Council unless you specify otherwise in your response.

If you have any questions or enquiries, please don't hesitate to contact us.

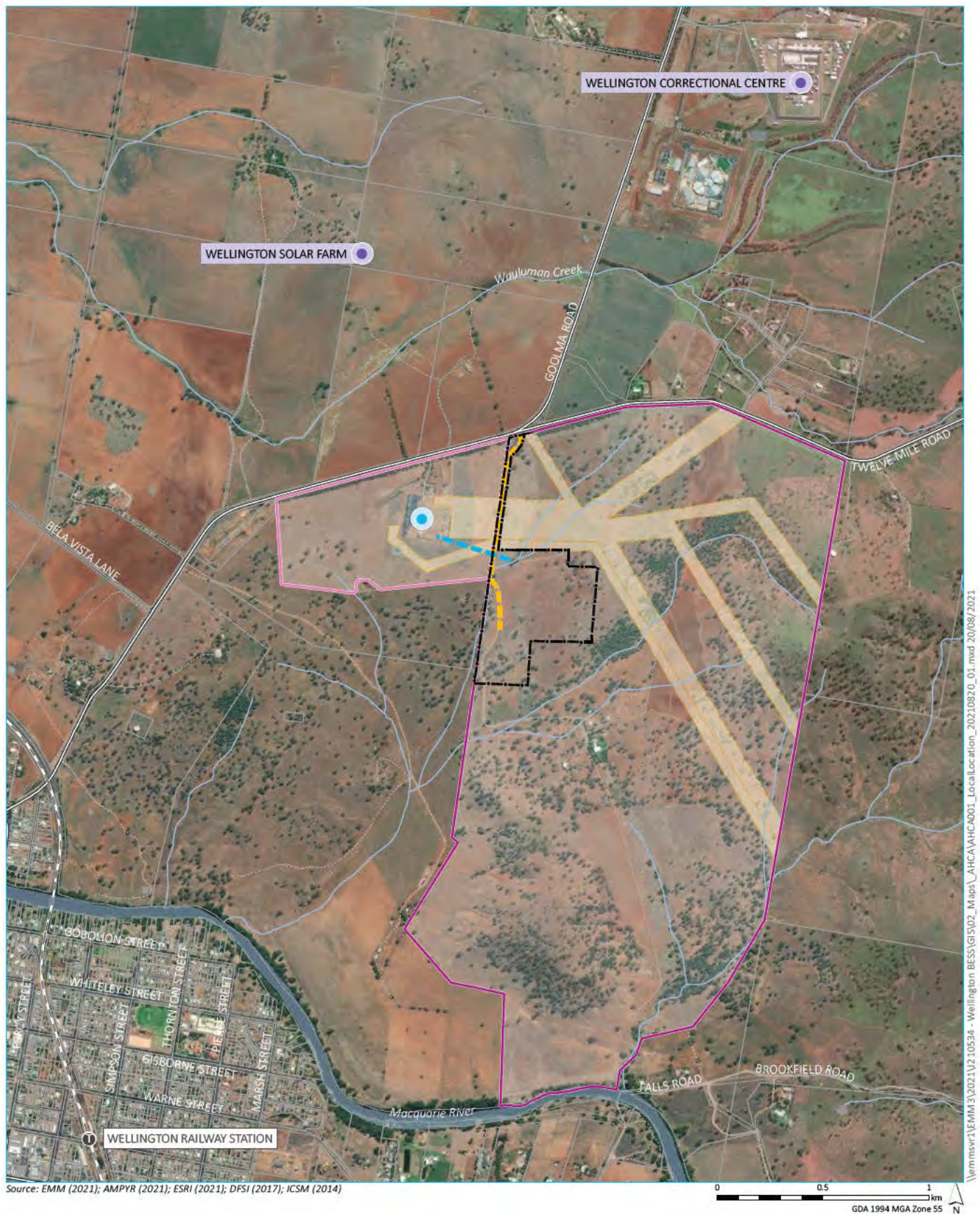
Yours sincerely



Georgia Burnett

Archaeologist

gburnett@emmconsulting.com.au



KEY

Proposed project infrastructure

- Project area
- Development footprint
- Site access
- Preliminary connection
- Existing infrastructure
- Wellington substation (TransGrid)
- Wellington substation site
- Freehold easement

Other site features

- Train station
- Rail line
- Major road
- Minor road
- Vehicular track
- Watercourse/drainage line
- Waterbody
- Cadastral boundary

Local setting

Wellington Battery Energy Storage Facility
Aboriginal stakeholder consultation

Figure 1.1

16 November 2021

Wellington Local Aboriginal Land Council
PO Box 90
Wellington NSW 2820

Ground floor, 20 Chandos Street
St Leonards NSW 2065
PO Box 21
St Leonards NSW 1590

T 02 9493 9500
E info@emmconsulting.com.au
www.emmconsulting.com.au

Re: Notification of registered Aboriginal parties - Wellington Battery Energy Storage System

Dear Sir/Madam,

EMM Consulting Pty Ltd (EMM) has been engaged by AMPYR Australia Pty Ltd (AMPYR) (the proponent) to undertake an Aboriginal Cultural Heritage Assessment for a proposed Battery Energy Storage System (BESS) to be constructed and operated at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP622471 and Lot 1 DP 1226751). The specific details of the development are currently being developed, but would likely include clearing, levelling, and excavation to accommodate footings and cables.

We are implementing the *Aboriginal cultural heritage consultation for requirements for proponents 2010*. In accordance with 4.1.6 of those requirements, we are providing a list of the six Aboriginal parties who have registered for consultation on the project; three groups have requested their information be withheld and therefore their information has been redacted.

As per the consultation requirements, the Registered Aboriginal Parties can be found in Table 1 and the forms of notification are attached to this letter.

Table 1 List of Registered Aboriginal Parties for the Wellington BESS project, Wellington NSW.

Organisation	Contact
Binjang Wellington Wiradjuri Heritage Survey	Jamie Grey
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
Wellington Local Aboriginal Land Council	CEO
Wellington Valley Wiradjuri Aboriginal Corporation	Brad Bliss
[REDACTED]	[REDACTED]

If you require further information, please do not hesitate to contact me.

Yours sincerely

A handwritten signature in black ink, reading 'C. Neal' in a cursive style.

Cameron Neal

Archaeologist

cneal@emmconsulting.com.au



creating opportunities

**Invitation for Registrations of Interest –
Aboriginal Cultural Heritage Assessment
– Huntingwood Data Centre, Blacktown
LGA.**

LEHR Consultants International (Australia) Pty Ltd is proposing the installation of a data centre at 6 Honeman Close, Huntingwood, NSW (Lot 5 DP 1238504). EMM is undertaking an Aboriginal cultural heritage assessment to inform the activity.

Contact details for the project are:
Shi-En Lim, LEHR Consultants International (Australia)
A: Level 4, 73 Walker Street, North Sydney, NSW 2060; T: 02 9157 0570; E: Shi-En.Lim@lciconsultants.com.au

Registrations are invited from Aboriginal individuals and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places in the area, and who wish to be involved in the consultation process undertaken as part of the assessment.

The purpose of consultation is to assist the proponent in: 1) assessing the Aboriginal heritage values of the area; 2) to assist NSW Government in the assessment of Aboriginal heritage reports prepared for this project; and 3) to support any future applications or approvals for the project sought under Environmental Planning and Assessment Act 1979 and/or National Parks and Wildlife Act 1974.

Registrations of interest should be provided by no later than 11 August 2021 to Alan Williams, EMM Consulting Pty Ltd, 20 Chandos Street, St Leonards, NSW 2065; T: 02 9493 9500; E: awilliams@emmconsulting.com.au

Plate 1 Newspaper advertisement placed in the *District Reporter* on 19 July 2021.

B.5 Stages 2 and 3 – presentation of information and gathering cultural information

24 September 2021

Ground floor, 20 Chandos Street
St Leonards NSW 2065
PO Box 21
St Leonards NSW 1590

T 02 9493 9500

E info@emmconsulting.com.au

www.emmconsulting.com.au

Re: Wellington Battery Energy Storage System - Project information and methodology

1 Introduction

Thank you for your ongoing involvement in the Wellington Battery Energy Storage System (BESS) project, located at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP622471 and Lot 1 DP 1226751) in the Dubbo Regional Council local government area (LGA). The BESS will be constructed within the project site area (approximately 28 hectares (ha)), with infrastructure to occupy an area of approximately 8 ha (the development footprint). The regional and local setting of project site area can be found in Figure 1.1 and Figure 1.2.

This project is being assessed as a State Significant Development (SSD-27014706) pursuant to Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP). SEARs have not yet been provided for the project, although are expected to contain requirements for a formal Aboriginal heritage assessment. This would be in the form of an Aboriginal cultural heritage assessment (ACHA).

AMPYR Australia Pty Ltd (AMPYR) are the project proponents and have engaged EMM Consulting Pty Ltd (EMM) to undertake the Aboriginal heritage investigations required for the project.

This document is provided in accordance with sections 4.2 and 4.3 of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010), which sets out the Aboriginal consultation requirements for the project. Additional Aboriginal community liaison and participation opportunities will occur in accordance with a project specific consultation strategy.

The aims of this letter are to:

- provide an overview of the project and how it will be assessed;
- provide background on the project and some of the initial investigations to date;
- establish the purpose and aims of the Aboriginal consultation process;
- seek information about any Aboriginal cultural heritage values associated with the project and how they may affect, inform or refine the project and/or assessment methods;
- seek information on any cultural activities (such as fishing and hunting) that have historically and/or is actively being undertaken in the project area;
- identify any culturally appropriate protocols that registered parties wish to be adopted during the information gathering process (eg protocols during field survey, or handling of culturally sensitive information); and

- present a draft of the intended assessment methods for your review and comment.

We welcome your feedback at your earliest convenience and will be consulting with the registered Aboriginal parties for the duration of the ACHA, currently proposed to extend to early 2022. However, for the purposes of this initial stage and in accordance with the Heritage NSW guidelines, we request any written response on the information and process below by **22 October 2021**.

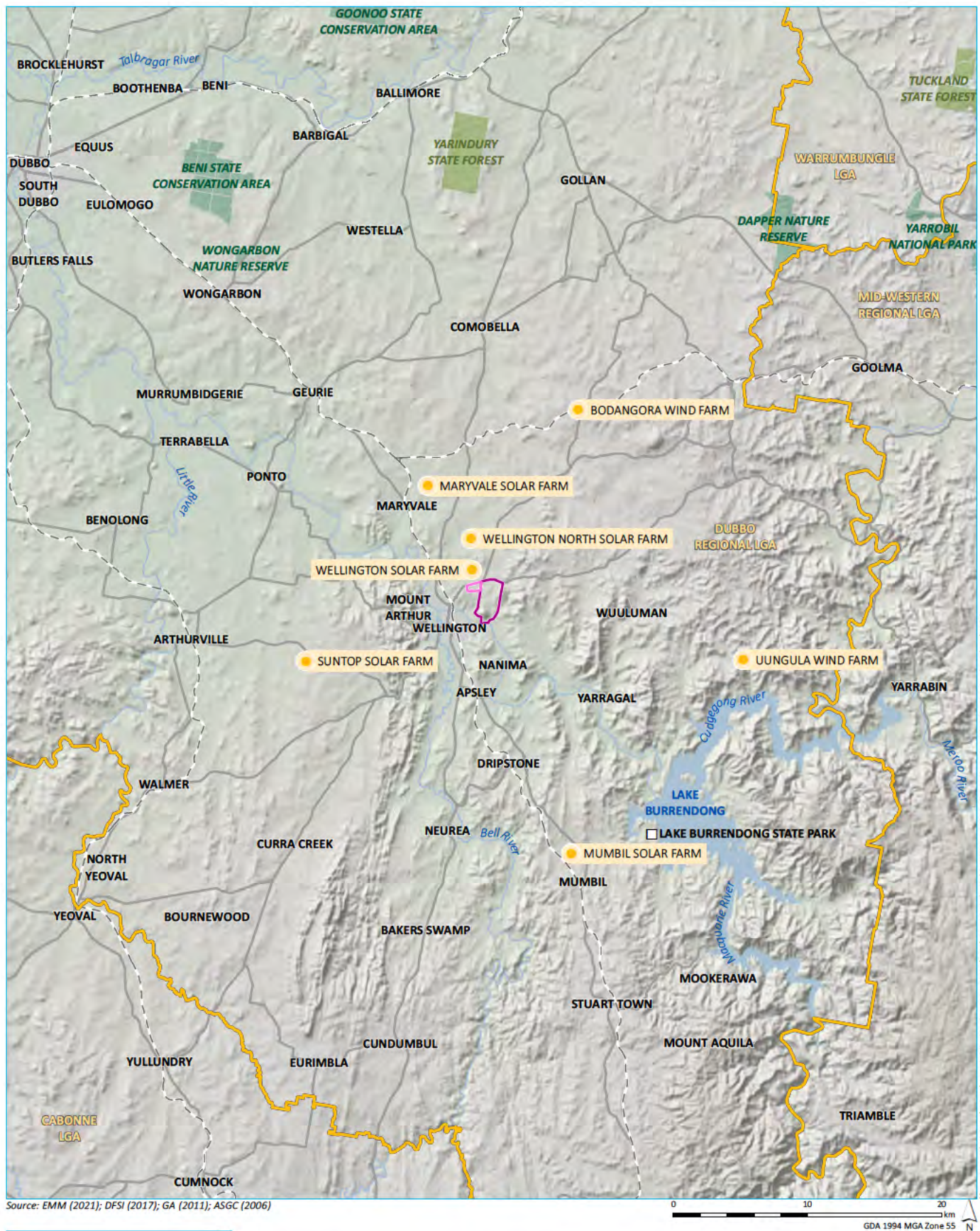
EMM is working on the proponent's behalf, and all queries should be directed through EMM.

Feedback can be provided to Georgia Burnett.

A: Ground Floor, 20 Chandos Street, St Leonards, NSW 2065; T:02 9493 9500;

E: gburnett@emmconsulting.com.au.

For reference, the proponent contact is: James North (Project Manager – BESS Development), AMPYR Australia Pty Ltd, 38 Young Street, Sydney NSW 2000, M: 0456 596 745, E: james.north@ampyrenergy.com

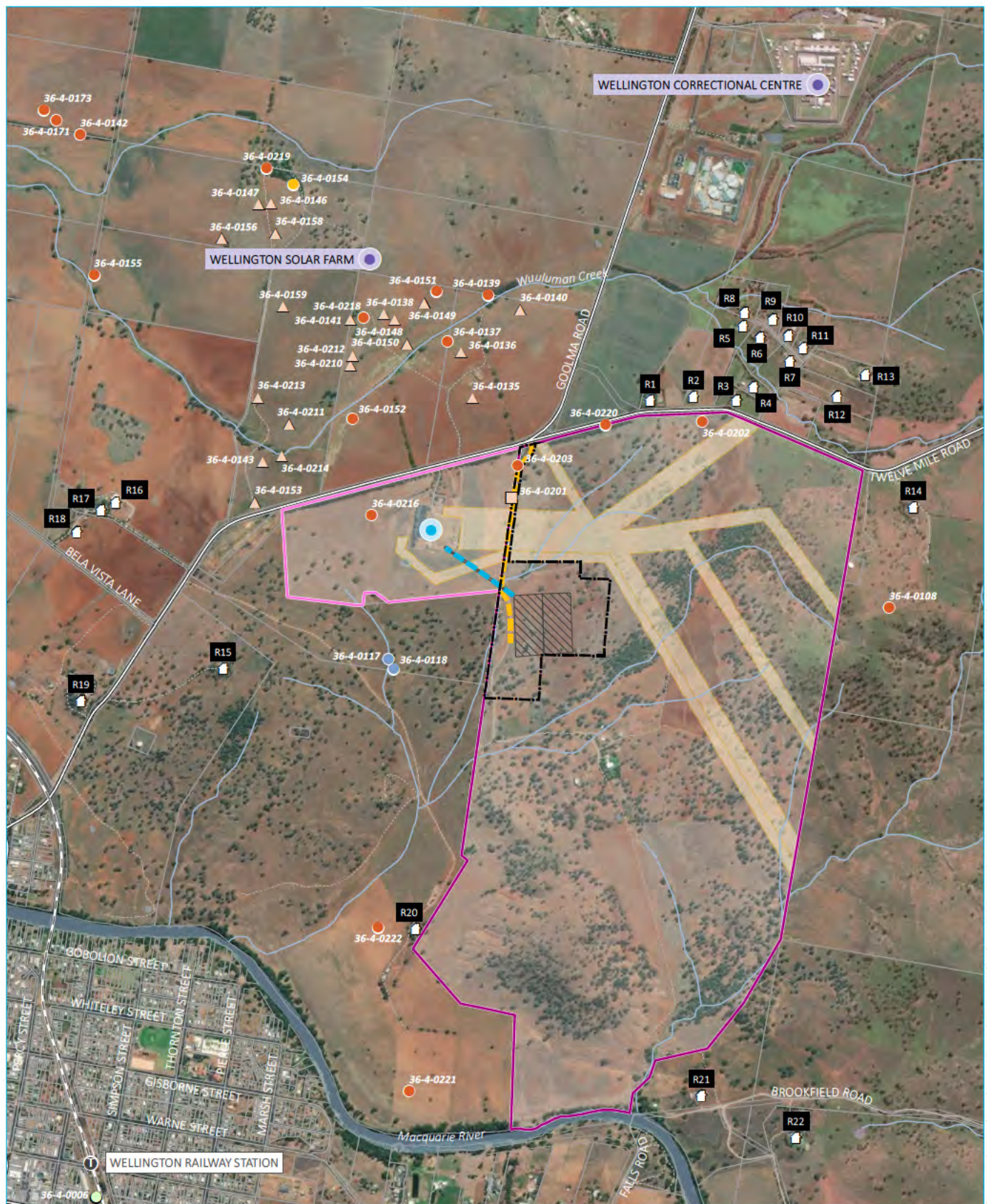


KEY

- Landholding
- Wellington substation site
- Renewable energy project
- Lake Burrendong State Park
- Rail line
- Major road
- Minor road
- River
- Named waterbody
- Local government area
- NPWS reserve
- State forest

Regional project location

Wellington Battery Energy Storage System
ACHA Methodology
Figure 1.1



Source: EMM (2021); AMPYR (2021); OEH (2021); ESRI (2021); DFSI (2017); ICSM (2014)

KEY

- Proposed project infrastructure**
- Landholding
 - Project site area
 - Indicative development footprint
 - Site access
 - Preliminary connection
 - Wellington substation site
 - Freehold easement

AHIMS (by status and features)

- Valid***
- Artifact
 - Modified tree (carved or scarred)
 - Modified tree (carved or scarred); ceremonial ring (stone or earth)
 - Potential archaeological deposit
- Destroyed**
- Artifact
- Not a site**
- Artifact

Other site features

- Project point of interest
- Non-project residential receiver
- Train station
- Rail line
- Major road
- Minor road
- Vehicular track
- Watercourse/drainage line
- Waterbody
- Cadastral boundary

Location of the project

Wellington Battery Energy Storage System
ACHA Methodology
Figure 1.2

2 Project information

2.1 Project overview

AMPYR is proposing the installation of a battery energy storage system (BESS) at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP622471 and Lot 1 DP 1226751), located approximately 3 km north-east from the town of Wellington, within the Dubbo LGA. The project will have a capacity of up to 500 megawatts (MW) and 1,000 megawatt-hour (MWh) and connect to the adjoining Wellington TransGrid substation (Lot 1 in DP 1226751) either by way of 330 kilovolt (kV) overhead or underground transmission line(s). The project will improve the reliability of energy supply in the region by providing storage and firming capacity to the National Energy Market (NEM).

The project will deliver improvements to the stability and reliability of the electricity network by storing energy during periods of low demand, and dispatching energy during periods of peak demand and providing system services if required by the Australian Energy Market Operator (AEMO) and/or the Transmission Network Service Provider (TNSP). It will also provide significant economic stimulus to the region through construction jobs and associated flow-on benefits.

The project will include batteries and associated enclosures. The BESS technology provider is yet to be determined; however, the batteries are likely to consist of modular lithium-ion type batteries. Other key elements include:

- power conversion systems (PCS) incorporating inverters to convert Direct Current (DC) to Alternating Current (AC) and to step up voltage;
- up to two onsite substations to convert voltages;
- cabling and collector units, internal access tracks, on-site parking, and security fencing and lighting and other ancillary infrastructure;
- a centralised control room, incorporating staff amenities and an ablutions facility; and
- an upgraded site access off Goolma Road providing access to the project and existing landholding.

Key design features of the battery are provided in Table 2.1.

Table 2.1 Key project design features

Feature	Parameter
Power output	500 MW
Energy storage capacity	1,000 MWh
Transmission voltage	330 kV
Charge and discharge cycle	365 days per year / one cycle per day
Design life	30 years (subject to component replacement)

The project will connect to the adjacent TransGrid substation by way of underground or overhead transmission lines, located approximately 400 m to the north-west of the project site area.

Proposed access arrangements including the design of site access are presently being considered. The project will either maintain connection to Goolma Road at its current location or be realigned to connect to Twelve Mile Road to the east of the existing intersection.

An additional access track of up to approximately 140 m would be required to facilitate connection to Twelve Mile Road. This additional area forms part of the current assessment.

2.2 Construction

The project is anticipated to take approximately 12 months to construct. Construction will involve the following activities:

- construction of an access track to project site;
- clearing of vegetation and cut and fill to desired design levels;
- watercourse diversion;
- construction of concrete slabs to support battery modules, PCS and substations;
- installation of battery modules, PCS, transformers, and substations;
- installation of 330kV overhead/underground cabling from battery substation to TransGrid switchyard;
- minor works in TransGrid switchyard to facilitate connection;
- testing and commissioning; and
- removal of construction activities and equipment and site clean-up.

During the construction phase of the project, a peak workforce in the order of 50 full-time employees (FTEs). Construction activities would be undertaken during standard day time construction hours. AMPYR will hire local contractors and suppliers for the construction of the facility wherever feasible.

Construction is expected to commence in the beginning of 2023 subject to planning approval and other authorisations.

3 Preliminary heritage findings

A desktop Aboriginal heritage constraints assessment was completed by EMM in August 2021. The purpose of the assessment was to:

- provide a desktop review of the known and predicted Aboriginal cultural heritage;
- identify Aboriginal cultural heritage opportunities and constraints for the project; and
- outline further assessment requirements and regulatory approval pathways.

In summary, two registered sites, AHIMS 36-4-0203 and 36-4-0201, were identified within the project site area and may be impacted by the proposed project access route (acknowledging that one of these sites, AHIMS 36-4-0201, was incorrectly identified/recorded and is no longer considered a site). Background information suggests that the indicative project area and broader investigation area retain potential for further stone artefacts sites (isolated or in low densities) and/or culturally modified trees to be identified – these sites are most likely to occur within 200 m of mapped watercourses.

4 Aboriginal stakeholders and consultation to date

EMM initiated the consultation process in early August 2021 and identified six Registered Aboriginal Party (RAP) organisations and/or individuals through formal notification as part of the Heritage NSW consultation requirements.

The following RAPs have registered for the project:

- Binjang Wellington Wiradjuri Aboriginal Corporation;
- [REDACTED]
- Galangabang Aboriginal Corporation;
- Wellington Valley Wiradjuri Aboriginal Corporation; and,
- [REDACTED]

Contact has not been able to be established with Wellington Local Aboriginal Land Council (WLALC) to date, despite multiple attempts, but given the jurisdiction, WLALC have been registered *in absentia*. Attempts at communication with WLALC will continue to be made.

5 Assessment methodology

5.1 Legislative context

The assessment of the proposed development is to be assessed as a State Significant Development (SSD) under Division 4.7 of the EP&A Act as well as the SRD SEPP. As such, the project requires an Environmental Impact Statement (EIS) addressing the Secretary's Environmental Assessment Requirements (SEARs). The SEARs for this project have not yet been issued, but are likely to contain requirements for an assessment conforming with the following guidelines under the *National Parks and Wildlife Act 1974*:

- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH 2011);
- *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW* (the Code of Practice) (DECCW 2010); and
- *Aboriginal Consultation Requirements for Proponents 2010* (DECCW 2010).

5.2 Methodology overview

There is potential for Aboriginal sites to occur within the project site area, primarily associated with the Macquarie River and its tributaries. Given the high levels of historic vegetation clearance across the site, unobtrusive site types are the most likely to be identified, such as isolated finds and artefact scatters; however, scarred trees are possible amongst mature vegetation, and have been identified as potentially present by Aboriginal stakeholders. The site is highly modified due to agricultural land uses, which will have direct implications on archaeological preservation. Without appropriate Aboriginal cultural heritage assessment and implementation of avoidance measures, the project has the potential to impact on Aboriginal cultural heritage through the disturbance or destruction of Aboriginal heritage sites potentially present within the project site area.

Given the above considerations, the SEARs will likely require a formal investigation addressing the Aboriginal cultural heritage values of the study area and strategies for managing any potential impacts. Therefore, the purpose of the assessment is to identify and manage the Aboriginal cultural heritage values of all areas that will be affected by the study.

In summary, this will involve.

- consultation with the Aboriginal stakeholders to identify socio-cultural values of the project area and places of special significance that should be considered;
- a search of the AHIMS register for records of previously registered Aboriginal sites (completed);
- a review of past Aboriginal heritage studies covering the study area and region;
- environmental landscape analysis to identify past Aboriginal resources and suitable occupation areas;
- synthesis of background research to develop a predictive model of Aboriginal site location;
- field investigation to validate the findings of the desktop and identify any previously undocumented cultural material. This would include surface inspection and may extend to test excavations of areas of archaeological interest;
- an assessment of significance for Aboriginal cultural heritage values in the project area (with input from the registered Aboriginal stakeholders);
- an impact assessment of how the project will affect Aboriginal cultural heritage values in the project area; and
- development of management recommendations based on the results of the assessment and input from registered Aboriginal stakeholders during the consultation process and particularly from the draft ACHA review period.

5.2.1 Field investigation

i Archaeological survey

Survey of the project site area would be undertaken to identify any extant Aboriginal objects or sites. Surface investigation will consist of the survey team evenly spaced (5-10 m apart) walking transects across accessible parts of the project site area and substation connection route, with a key focus on targeting areas of low disturbance. The focus of the team will be to both investigate soil exposures for extant Aboriginal objects and identify landforms that have potential for cultural material to be present (either surface or subsurface). Given the small size of the project site area, it may be possible to survey the project site area and substation connection route. If this is not possible due to on-site conditions, such as poor weather or visibility, a representative sample of each landform within the project area will be gathered to characterise the archaeology, or its potential, of the project area. All Aboriginal objects and/or landforms of interest would be mapped and documented using hand-held GPS, photographs and written description.

The survey will be undertaken in accordance with Requirements 5 to 10 of the Code of Practice. In summary, the Code of Practice requires the following general methodology:

- pedestrian survey;
- survey and recording according to survey unit and/or transect;
- recording of beginning and end points of transects or the boundaries of survey units, and the spacing between survey personnel;
- recording of landform, soil information, land surface, vegetation conditions, visibility and exposure, and survey coverage;

- recording of any identified Aboriginal sites identified according to Requirements 6-8, and recording of any identified Aboriginal objects in accordance with Requirements 18-24 of the Code of Practice; and
- if any Aboriginal objects and/or sites are identified in the course of the survey, site cards will be completed and submitted to the AHIMS registrar.

ii Test excavations

At this stage, no test excavations are proposed for the study area. However, if test excavations are required to further characterise the archaeological resource of an area identified in the survey, they would be implemented shortly following the survey, in accordance with the Code of Practice. Specifically, they would include the following activities:

- all test excavation pits would be spatially located using a differential GPS device, which would also provide elevation data;
- manual excavation of 0.25 m² test pits in a systematic grid across areas of archaeological interest within the impact footprint. The spatial resolution of the grid would be dependent on on-ground conditions, but would likely have test pits between 20-50 m apart;
- all excavation would use hand tools. Excavation of the first unit would be in 5 cm spits, with subsequent excavation allowed in 10 cm spits or according to stratigraphy (whichever is smallest) depending on the results of the first unit. Manual excavation would continue to either: i) the base of the cultural deposits; ii) to the depth of the underlying geology; or iii) to the maximum depth possible via hand excavation (likely ~ 80 cm).
- sieving of all manually excavated material through a 5 mm sieve;
- reduced levels of the top and bottom of the test pit would be documented using a dumpy level against a known elevation. Other levels may be taken as required;
- soil profiles would be recorded in accordance with the Code of Practice, including scaled drawings, photographs, and written descriptions;
- soil samples may be collected for description, sedimentological and chronological analysis where such analysis is considered likely to contribute significant information; and
- excavation procedures and protocols may be modified at the discretion of the Excavation Director, in consultation with the Aboriginal stakeholders and the proponent as the conditions in the field and nature of the excavations develop. This includes the movement of test pits to avoid existing built structures, buried services and disturbances not identified during the desktop phase.

EMM will aim to update RAPs shortly after the archaeological survey if test excavation is required for the project.

5.3 Timeframes

The following indicative timeframes for the works would apply (noting these will be subject to test excavation requirements and may change depending on health advice relating to Covid-19):

- distribution of this document to the registered Aboriginal stakeholders: 22 October 2021
- field investigation of the study area: late October to early November 2021;
- distribution of the draft report: mid November 2021;
- input of RAP feedback into recommendations and review of draft report: December 2021; and
- report finalisation: late December 2022.

6 What we need from you

In addition to the archaeological evidence described above, Aboriginal heritage incorporates a wide range of values such as stories, traditions and cultural practices. EMM welcomes advice from the Aboriginal community about cultural values (which might include archaeological sites or other types of values) relevant to the project area and its surrounds. EMM is relying on the Aboriginal community for advice on non-archaeological and intangible Aboriginal values for the study area. We are happy to discuss any information which you are willing to share and will respect confidentiality where requested.

EMM would appreciate your feedback on the above methodology proposed for the investigation and assessment of the project area. In responding, please also consider the following questions:

- Are there any other knowledge-holders or traditional owner groups we should be contacting to obtain cultural information on this area?
- Are there any protocols in relation to community interaction and/or cultural heritage that you would like adopted during the project?
- Are you aware of any Aboriginal objects, places, sites or stories of cultural significance and/or importance that you are aware of within the project area? If so, please advise us how you wish them to be dealt with during the project.
- Are you aware of any past or current hunting/food procurement activities within the project area? Do you have any views on how these should be managed into the future?
- Is the information you are providing sensitive, gender specific, etc? If so, how would you like the information you provide to EMM to be managed? Noting that some documentation for the ACHA process will be required.
- Do you require any further information prior to EMM proceeding with the project?

In your response, can you please also clearly identify who you would like EMM to talk to within your organisation, and provide contact details for these individuals. Please also ensure your preferred method of communication (eg telephone call, email, letter, etc) is highlighted for subsequent stages of the project.

The roles, functions and responsibilities of all parties involved in the consultation process are outlined in Table 6.1.

Table 6.1 Roles, functions and responsibilities

Stakeholder	Roles and responsibilities
RAPs	<p>Provide cultural perspectives, views, knowledge and advice to EMM.</p> <p>Indicate areas of cultural significance.</p> <p>Provide Aboriginal sites representatives for archaeological fieldwork (if desired and suitably qualified and insured).</p> <p>Have an awareness and understanding of the commercial environment and constraints in which AMPYR operate.</p> <p>Demonstrate awareness and understanding of the opportunities to provide input into the ACHA and management recommendations.</p> <p>Identify, raise, and discuss cultural concerns, perspectives and assessment requirements (if any).</p>

Table 6.1 **Roles, functions and responsibilities**

Stakeholder	Roles and responsibilities
EMM (on behalf of AMPYR)	Undertake the ACHA, including coordinating and directing the fieldwork. Facilitate the Aboriginal consultation process. Consider the cultural perspectives, views, knowledge and advice of the RAPs in assessing cultural significance and developing management measures. Provide clear management measures that comply with relevant legislation, guidelines and significance.
All stakeholders	Mutual respect (each person has the right to have a say and be heard). Communicate in a professional manner.

7 Closing

We look forward to receiving any response your organisation wishes to make about the proposed method by **22 October 2021**. Your response will be documented and considered in the assessment. Most importantly, your cultural information is also welcome within this timeframe; but it can also be submitted up until the completion of the draft ACHA.

Please feel free to contact me with any questions.

Yours sincerely,



Cameron Neal
Archaeologist
cneal@emmconsulting.com.au

Megan Sheppard Brennand

From: Cameron Neal
Sent: Friday, 24 September 2021 4:54 PM
To: Georgia Burnett
Cc: Ryan Desic; Christopher Colusso
Subject: Wellington Battery Energy Storage System - Assessment Methodology
Attachments: J210534_Wellington BESS ACHA_Methodology.pdf

Hi All,

Thank you for your ongoing involvement in the Wellington Battery Energy Storage System (BESS) project. In accordance with Heritage NSW guidelines, please find attached our draft assessment methodology for your review and comment. In particular, we are keen to hear about any areas of cultural significance which may not necessarily leave a physical trace in the landscape, or whether there are any cultural values you would like to see represented during the project (eg planting of traditional food and medicine plant species).

We are requesting all feedback by **COB 22 October 2021**.

Happy to chat further if you need clarification on anything. Hope everyone is staying safe!

Kind regards,
Cameron

Cameron Neal

Archaeologist

Bushfire, Ecology, Heritage and Spatial Solutions



SYDNEY | Ground floor, 20 Chandos Street, St Leonards NSW 2065

T 02 9493 9500

M 0459 326 362

www.emmconsulting.com.au

I work flexibly. I'm sending you this message now because it's a good time for me, but do not expect you to read, respond or action it outside your regular hours

GALLANGGABANG ABORIGINAL CORPORATION

"Traditional Families of the Wellington Valley & District"

(ABN 21 623 626 328)

(ICN 3477)

PO Box 508

Wellington NSW 2820



6th October 2021

Georgia Burnett
Archaeologist
EMM
PO Box 21
St Leonards NSW 1590

Re: Wellington Battery Energy Storage System - Project information and methodology. Dated 24 September 2021.

Dear Georgia,

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

GAC object to any other non-traditional aboriginal organizations or people taking part in site surveys, consultation and assessments within our defined Traditional Lands. These non-traditional people and groups are outsiders under Traditional Lore and have no right to advise on or to be present during consultation or site visits as they do not possess the specific traditional knowledge in relation to these lands or sites. These participants may be indigenous and may live locally within the region however, this still does not give them the right to disregard Traditional Lore and values.

Gallanggabang Aboriginal Corporation (GAC) have through consultation with Elders and Traditional Community with cultural knowledge have the following comments and or recommendations:

5.2.1 Field investigation

i Archaeological survey

- GAC membership and Elders agree to this proposed pedestrian survey methodology, we note "survey team walking evenly spaced (5-10 m apart) transects across all accessible portions of the Project area".
 - This is agreeable, however at times the grass surrounding the existing sub-station can be long and visibility may be less than 2-3m and will need to be varied to adjust to the localised conditions at the time of the survey

ii Test excavations

- GAC agree to most of the information as discussed in this section. We do note *"The spatial resolution of the grid would be dependent on on-ground conditions, but would likely have test pits between 10-50m apart"*.
 - GAC request that the test pits be spaced no greater than 10m apart unless is it unavoidable due to geographic features such as a local creek or drainage line.
- GAC request that any artefacts recovered from test pit excavations be returned to site and reburied following a smoking ceremony to cleanse the reburial site and the artefacts. No cultural material is to be given over to any

GALLANGGABANG ABORIGINAL CORPORATION

“Traditional Families of the Wellington Valley & District”

(ABN 21 623 626 328)

(ICN 3477)

PO Box 508

Wellington NSW 2820

one single RAP entity, ALL cultural material must remain onsite once construction of the project has been completed.

5.3 Timeframes

- Timeframes may need to be adjusted due to shortage of field officers from not only GAC but also from other RAP's due to projects that were paused due to Covid-19 requiring completion.

6 What we need from you

- Field Officers from Gallanggabang, WVVAC, Binjang Wellington Wiradjuri Aboriginal Corporation and Corroboree Aboriginal Corporation, have conducted extensive survey work around this project site previously with for the Wellington Solar Farm, most of the artefact locations are known to us collectively.
- The known sites are generalized sites and are not gender specific. There are areas located outside of the project area that are gender specific and feature in our Traditional Knowledge and Lore.

Gallanggabang Aboriginal Corporation (GAC) do not object to our details being given to DPIE, however do not wish you to advise any other organization of our interest and knowledge relating to this project. GAC look forward to further participating in the above project, sharing our knowledge of country and to ensure our Heritage is protected.

We trust our response meets your requirements. Please contact GAC Directors should you require our assistance to address any Aboriginal issues to support your future plans.

Regards,

Brenn Doherty
Gallanggabang Aboriginal Corporation Director
Senior Aboriginal Cultural Heritage Field Officer
Senior Aboriginal Cultural Mentor and Educator
Traditional Owner Clan Descendant



WELLINGTON VALLEY WIRADJURI
ABORIGINAL CORPORATION

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

WWWAC@hotmail.com

6th October 2021

Georgia Burnett
Archaeologist
EMM
PO Box 21
St Leonards NSW 1590

Re: Wellington Battery Energy Storage System - Project information and methodology. Dated 24 September 2021.

Dear Georgia,

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

WWWAC object to any other non-traditional aboriginal organizations or people taking part in site surveys, consultation and assessments within our defined Traditional Lands. These non-traditional people and groups are outsiders under Traditional Lore and have no right to advise on or to be present during consultation or site visits as they do not possess the specific traditional knowledge in relation to these lands or sites. These participants may be indigenous and may live locally within the region however, this still does not give them the right to disregard Traditional Lore and values.

Wellington Valley Wiradjuri Aboriginal Corporation (WWWAC) have through consultation with other Traditional Elders and Traditional Community with cultural knowledge have the following comments and or recommendations:

5.2.1 Field investigation

i Archaeological survey

- WWWWAC membership and Elders agree to this proposed pedestrian survey methodology, we note "survey team walking evenly spaced (5-10 m apart) transects across all accessible portions of the Project area".

- This is agreeable, however at times the grass surrounding the existing sub-station can be long and visibility may be less than 2-3m and will need to be varied to adjust to the localised conditions at the time of the survey

ii Test excavations

- WVVAC agree to most of the information as discussed in this section. We do note *“The spatial resolution of the grid would be dependent on on-ground conditions, but would likely have test pits between 10-50m apart”*.

- WVVAC request that the test pits be spaced no greater than 10m apart unless it is unavoidable due to geographic features such as a local creek or drainage line.

- WVVAC request that any artefacts recovered from test pit excavations be returned to site and reburied following a smoking ceremony to cleanse the reburial site and the artefacts. No cultural material is to be given over to any one single RAP entity, ALL cultural material must remain onsite once construction of the project has been completed.

5.3 Timeframes

- Timeframes may need to be adjusted due to shortage of field officers from not only WVVAC but also from other RAP's due to projects that were paused due to Covid-19 requiring completion.

6 What we need from you

- Field Officers from WVVAC, Gallangabang, Binjang Wellington Wiradjuri Aboriginal Corporation and Corroboree Aboriginal Corporation, have conducted extensive survey work around this project site previously with for the Wellington Solar Farm, most of the artefact locations are known to us collectively.
- Field Officers from WVVAC have recorded additional sites with restricted access on AHIMS not far from the project site and can be discussed directly with WVVAC CEO if required, however are located outside of the project area.
- The known sites are generalized sites and are not gender specific. There are areas located outside of the project area that are gender specific and feature in our Traditional Knowledge and Lore.

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

Regards,



Bradley R. Bliss J.P.
WVVAC CEO and Contact Officer
Gallangabang Aboriginal Corporation Director
Senior Aboriginal Cultural Heritage Field Officer
Senior Aboriginal Cultural Mentor and Educator
Traditional Owner Clan Descendant
Mobile: 0427321016

Georgia Burnett

From: Georgia Burnett
Sent: Friday, 8 October 2021 3:00 PM
To: WVVAC Contact Officer
Cc: Ryan Desic; Cameron Neal
Subject: RE: Wellington Battery Energy Storage System - Assessment Methodology

Hi Bradley,

Thank you for your email, and apologies for the delay in responding; I have been on fieldwork for another project.

Thank you for your detailed feedback on our assessment proposed assessment methods, it is greatly appreciated; please pass on my thanks to Brenn from GAC. I note the feedback in particular regarding survey and excavation spacing, and preference for artefacts to be reburied on site (if required). As you suggested, survey will be dictated by the conditions on site and in discussion with site officers present during the survey. As stated in EMM's letter, test excavations are not proposed at this time and the need will be determined based on the findings of the field survey in conjunction with the final project design. Known sites in the vicinity of the project area which you and Brenn refer to can also be discussed in person when we undertake the survey. I also note the comment regarding timeframes, and we will do our best to provide plenty of notice and flexibility to work with your scheduling.

[REDACTED]

Please let me know if you need anything further.

Kind regards,
Georgia

Georgia Burnett
Archaeologist

T 02 9493 9500

M 0459 295 806

www.emmconsulting.com.au

From: WVVAC Contact Officer <WVVAC@hotmail.com>
Sent: Wednesday, 6 October 2021 1:22 PM
To: Cameron Neal <cneal@emmconsulting.com.au>; Georgia Burnett <gburnett@emmconsulting.com.au>
Cc: Ryan Desic <rdesic@emmconsulting.com.au>; Christopher Colusso <ccolusso@emmconsulting.com.au>
Subject: RE: Wellington Battery Energy Storage System - Assessment Methodology

CAUTION: This email originated outside of the Organisation.

Hi Cameron and Georgia,

I attached the response to the Methodology for this project for both Wellington Valley and Gallangabang Aboriginal Corporations.

[REDACTED]

Regards,

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

Sent from [Mail](#) for Windows 10

From: [Cameron Neal](#)
Sent: Friday, 24 September 2021 4:54 PM
To: [Georgia Burnett](#)
Cc: [Ryan Desic](#); [Christopher Colusso](#)
Subject: Wellington Battery Energy Storage System - Assessment Methodology

Hi All,

Thank you for your ongoing involvement in the Wellington Battery Energy Storage System (BESS) project. In accordance with Heritage NSW guidelines, please find attached our draft assessment methodology for your review and comment. In particular, we are keen to hear about any areas of cultural significance which may not necessarily leave a physical trace in the landscape, or whether there are any cultural values you would like to see represented during the project (eg planting of traditional food and medicine plant species).

We are requesting all feedback by **COB 22 October 2021**.

Happy to chat further if you need clarification on anything. Hope everyone is staying safe!

Kind regards,
Cameron

Cameron Neal
Archaeologist
Bushfire, Ecology, Heritage and Spatial Solutions



SYDNEY | Ground floor, 20 Chandos Street, St Leonards NSW 2065

T 02 9493 9500

M 0459 326 362

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I work flexibly. I'm sending you this message now because it's a good time for me, but do not expect you to read, respond or action it outside your regular hours

B.6 Stage 4 – Aboriginal feedback of the draft ACHA

From: [Georgia Burnett](#)
Cc: [Ryan Desic](#); [Christopher Colusso](#)
Bcc: [wellingtonlalc@yahoo.com](#); [corroboreecorp@bigpond.com](#); [wokacorp@yahoo.com](#); [wwwac@hotmail.com](#); [wwwac@hotmail.com](#); [jamiegray66@gmail.com](#)
Subject: Wellington BESS - ACHA draft for review and comment
Date: Wednesday, 9 February 2022 11:18:00 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

Hi all,

Thank you all for your involvement to date for the Aboriginal cultural heritage assessment for the proposed Wellington Battery Energy Storage System (BESS) project at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP 622471 and Lot 1 DP 1226751). I can now provide you with a copy of the draft ACHA, for your review.

The draft report can be downloaded from the following link: 

[J210534_6_WellingtonBESS_ACHA_V2.0_Redacted.pdf](#)

I invite you to please have a look through the report and if you would like, to provide any feedback, thoughts or input on the proposed recommendations. I would greatly appreciate any feedback, but please aim to get to that back to me before COB **Wednesday 9 March 2022**.

If you have any problems downloading or accessing the report, or want to chat about the report further, please feel free to email or call to discuss (contact details below). Also, if you require a printed copy posted to you, please let me know (and provide postal information) and I can arrange this for you.

Kind regards,
Georgia

Georgia Burnett

Archaeologist

Bushfire, Ecology, Heritage and Spatial Solutions



T 02 9493 9500

M 0459 295 806

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From: [Georgia Burnett](#)
Cc: [Ryan Desic](#); [Christopher Colusso](#)
Bcc: [wellingtonlalc@yahoo.com](#); [corroboreecorp@bigpond.com](#); [wokacorp@yahoo.com](#); [wwwac@hotmail.com](#); [wwwac@hotmail.com](#); [jamiegray66@gmail.com](#)
Subject: RE: Wellington BESS - ACHA draft for review and comment
Date: Monday, 7 March 2022 9:55:00 AM
Attachments: [image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)

Hi all,

Just a quick follow up reminder that the comment period closes this Wednesday (9 March). Please let me know if you have any comments or concerns at your earliest convenience as we will be looking to finalise the report shortly after.

Kind regards,
Georgia

Georgia Burnett

Archaeologist

T 02 9493 9500


M 0459 295 806

www.emmconsulting.com.au

From: Georgia Burnett
Sent: Wednesday, 9 February 2022 11:19 AM
Cc: Ryan Desic <rdesic@emmconsulting.com.au>; Christopher Colusso <ccolusso@emmconsulting.com.au>
Subject: Wellington BESS - ACHA draft for review and comment

Hi all,

Thank you all for your involvement to date for the Aboriginal cultural heritage assessment for the proposed Wellington Battery Energy Storage System (BESS) project at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP 622471 and Lot 1 DP 1226751). I can now provide you with a copy of the draft ACHA, for your review.

The draft report can be downloaded from the following link: 
[J210534_6_WellingtonBESS_ACHA_V2.0_Redacted.pdf](#)

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If you have any problems downloading or accessing the report, or want to chat about the report further, please feel free to email or call to discuss (contact details below). Also, if you require a printed copy posted to you, please let me know (and provide postal information) and I can arrange this for you.

Kind regards,
Georgia

Georgia Burnett

Archaeologist

Bushfire, Ecology, Heritage and Spatial Solutions



T 02 9493 9500

M 0459 295 806

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From: [WVWAC Contact Officer](#)
To: [Georgia Burnett](#)
Cc: [Brubaker69@outlook.com](#); "Diana Astin"; [melissa](#)
Subject: RE: Wellington BESS - ACHA draft for review and comment
Date: Monday, 7 March 2022 4:00:49 PM
Attachments: [image004.png](#)
[image006.png](#)
[image007.png](#)
[85DB8B6F9E5D4F3881C3C7049F3A022C.png](#)
[ACHA Wellington Battery Energy Storage System WVWAC response 07.03.2022.pdf](#)

CAUTION: This email originated outside of the Organisation.

Hi Georgia,

Please find attached WVWAC response to the draft ACHA for Wellington BESS.

Regards,

Bradley R. Bliss J.P.
WVWAC Chairman and Contact Officer
P.O. Box 1583
Orange NSW 2800
Email: WVWAC@hotmail.com
Mobile: 0427321016

Sent from [Mail](#) for Windows 10

From: [Georgia Burnett](#)
Sent: Monday, 7 March 2022 9:55 AM
Cc: [Ryan Desic](#); [Christopher Colusso](#)
Subject: RE: Wellington BESS - ACHA draft for review and comment

Hi all,

Just a quick follow up reminder that the comment period closes this Wednesday (9 March). Please let me know if you have any comments or concerns at your earliest convenience as we will be looking to finalise the report shortly after.

Kind regards,
Georgia

Georgia Burnett

Archaeologist

T 02 9493 9500

M 0459 295 806

www.emmconsulting.com.au


From: Georgia Burnett
Sent: Wednesday, 9 February 2022 11:19 AM

Cc: Ryan Desic <rdesic@emmconsulting.com.au>; Christopher Colusso
<ccolusso@emmconsulting.com.au>

Subject: Wellington BESS - ACHA draft for review and comment

Hi all,

Thank you all for your involvement to date for the Aboriginal cultural heritage assessment for the proposed Wellington Battery Energy Storage System (BESS) project at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP 622471 and Lot 1 DP 1226751). I can now provide you with a copy of the draft ACHA, for your review.

The draft report can be downloaded from the following link: 
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I invite you to please have a look through the report and if you would like, to provide any feedback, thoughts or input on the proposed recommendations. I would greatly appreciate any feedback, but please aim to get to that back to me before COB **Wednesday 9 March 2022**.

If you have any problems downloading or accessing the report, or want to chat about the report further, please feel free to email or call to discuss (contact details below). Also, if you require a printed copy posted to you, please let me know (and provide postal information) and I can arrange this for you.

Kind regards,
Georgia

Georgia Burnett

Archaeologist

Bushfire, Ecology, Heritage and Spatial Solutions



T 02 9493 9500

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WELLINGTON VALLEY WIRADJURI
ABORIGINAL CORPORATION



7th March 2022

Georgia Burnett
Archaeologist
EMM
PO Box 21
St Leonards NSW 1590

Re: Aboriginal Cultural Heritage Assessment - Wellington Battery Energy Storage System. Dated: February 2022.

Dear Georgia,

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

WVWAC object to any other non-traditional aboriginal organizations or people taking part in site surveys, consultation and assessments within our defined Traditional Lands. These non-traditional people and groups are outsiders under Traditional Lore and have no right to advise on or to be present during consultation or site visits as they do not possess the specific traditional knowledge in relation to these lands or sites. These participants may be indigenous and may live locally within the region however, this still does not give them the right to disregard Traditional Lore and values.

Wellington Valley Wiradjuri Aboriginal Corporation (WVWAC) have through consultation with other Traditional Elders and Traditional Community with cultural knowledge have the following comments and or recommendations:

Section 8.2 Statement of Significance, pg. 52.

- WVWAC WVWAC Elders and Members would like to advise that the area surrounding and in part covered by the survey was used as a movement corridor between what is now Wuuluman Creek and Wambuul (Macquarie River). Aesthetically the landscape is pleasing and the topography lends itself to the wider surrounding cultural landscape. For which Culturally we believe the landscape in this area to have a moderate Significance rating.

Section 9.3 Aboriginal Heritage Impact, pp. 53-54.

- WVWAC Elders and Members understand that no surface artefacts were identified during the pedestrian survey, the report also shows images of areas with thick grass coverage and minimal ground visibility. It is also stated that *"no areas of sub-surface potential warranting further investigation were identified"*. There is a "Y" shaped seasonal drainage line within the project area, was there no soil deposit in this area, could the "B" Horizon be clearly identified through visual inspection?
- No Project area specific sites or values were advised, this is due to the multigenerational loss of knowledge, we know that the Project Area and surrounds were used as a movement corridor between what is now

Wuuluman Creek and Wambuul (Macquarie River), we have lost the site specific knowledge of where our ancestors used within this tight project space or the wider visually identified landscape, as such WVVAC Elders and Members believe that there will be a Cultural Value Loss relating to the landscape and anthropologically relating to our cultural landscape management and use.

Section 9.4 Cumulative Impacts and intergenerational loss/equity pg. 54.

- WVVAC Elders and Members believe that the more projects that occur and either remove or destroy sites and the landscape rather than avoidance is compounding the continual intergenerational loss of our cultural sites, cultural landscape and cultural knowledge that can be handed down to the future generations that are emerging or yet to be born. For them to understand their heritage in the physical form not just from digital copies of report or photos.
- WVVAC Elders and Members Recommends the complete avoidance of Registered AHIMS Site 36-4-0203 Wellington North SF IF1. We recommend that the Artefact must be positively identified prior to any ground disturbance and a minimum 5m high viability barrier be erected around the artefact.
- WVVAC Elders and Members Recommends the complete avoidance of Registered AHIMS Site 36-4-0201 Wellington North SF IF3. We recommend that the Artefact must be positively identified prior to any ground disturbance and a minimum 5m high viability barrier be erected around the artefact.

Section 10.3 Recommendations pp. 55-56.

- WVVAC Elders and Members agree with the draft recommendations however, add the following additional recommendations:
- WVVAC Elders and Members request that the Draft Aboriginal Cultural Heritage Management Plan (ACHMP) be developed in a workshop activity by Archaeologists and RAP's as it is becoming more and more evident that Archaeologists and Proponents discuss what they want then send a draft version for consideration, We as RAP's want first hand discussions relating to our ancestral lands, cultural materials and landscapes.
- An Aboriginal Cultural Heritage Induction Program be developed by the RAP's and delivered to each worker onsite as groups, to ensure our culture, heritage and artefactual materials are identified and managed appropriately.
- WVVAC Elders and Members request that the Construction Environment Management Plan (CEMP) also be distributed to RAP's as this also concerns our Cultural Landscape and how it is managed.

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

Regards,



Bradley R. Bliss J.P.
WVVAC CEO and Contact Officer
Senior Aboriginal Cultural Heritage Field Officer
Senior Aboriginal Cultural Mentor and Educator
Mobile: [REDACTED]

From: [Georgia Burnett](#)
Cc: [Claire Burnes](#)
Bcc: [wellingtonlaic@yahoo.com](#); [corroboreecorp@bigpond.com](#); [wokacorp@yahoo.com](#); [wwwac@hotmail.com](#); [wwwac@hotmail.com](#); [jamiegray66@gmail.com](#)
Subject: Wellington ACHA - Draft ACHA for comment (v3)
Date: Tuesday, 6 September 2022 6:36:00 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

Hi all,

Thank you all for your involvement to date for the Aboriginal cultural heritage assessment for the proposed Wellington Battery Energy Storage System (BESS) project at 6773 Goolma Road, Wuuluman NSW 2820 (Lot 32 DP 622471 and Lot 1 DP 1226751). Earlier this year, the draft ACHA was provided to you for your review and comment. Following some minor additions to the project area, we are inviting you to provide a second round of comments on the report.

Link to download the report: [J210534_6_WellingtonBESS_ACHA_V3_final.pdf](#)

In short, the additional area comprises a small portion of land within and adjacent to the existing Wellington substation. The proposed development in this area relates primarily to upgrades of the existing TransGrid Wellington Substation, and may include an additional 330 kV switch bay with power transformers (which would be installed as an alternative to the transformer bays being located on the BESS site), switchyard bench extension to the south of the existing bench and relocation of security fencing. Observations made on site during the survey suggest the area is similar to the surveyed locale, and is of low archaeological potential. This areas will be managed, like the rest of the site, through the proposed ACHMP document put forward in the recommendations (see section 10 of the report).

I invite you to please have a look through the report and if you would like, to provide any feedback, thoughts or input on the proposed recommendations. I would greatly appreciate any feedback, but please aim to get to that back to me before COB **Wednesday 5 October**. This review will coincide in part with the public exhibition of the broader Environmental Impact Statement (EIS).

If you have any problems downloading or accessing the report, or want to chat about the report further, please feel free to email or call to discuss (contact details below). Also, if you require a printed copy posted to you, please let me know (and provide postal information) and I can arrange this for you.

Kind regards,
Georgia

Georgia Burnett

Senior Archaeologist
Bushfire, Ecology, Heritage and Spatial Solutions



T 02 9493 9500

M 0459 295 806

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SYDNEY | Ground floor, 20 Chandos Street, St Leonards NSW 2065

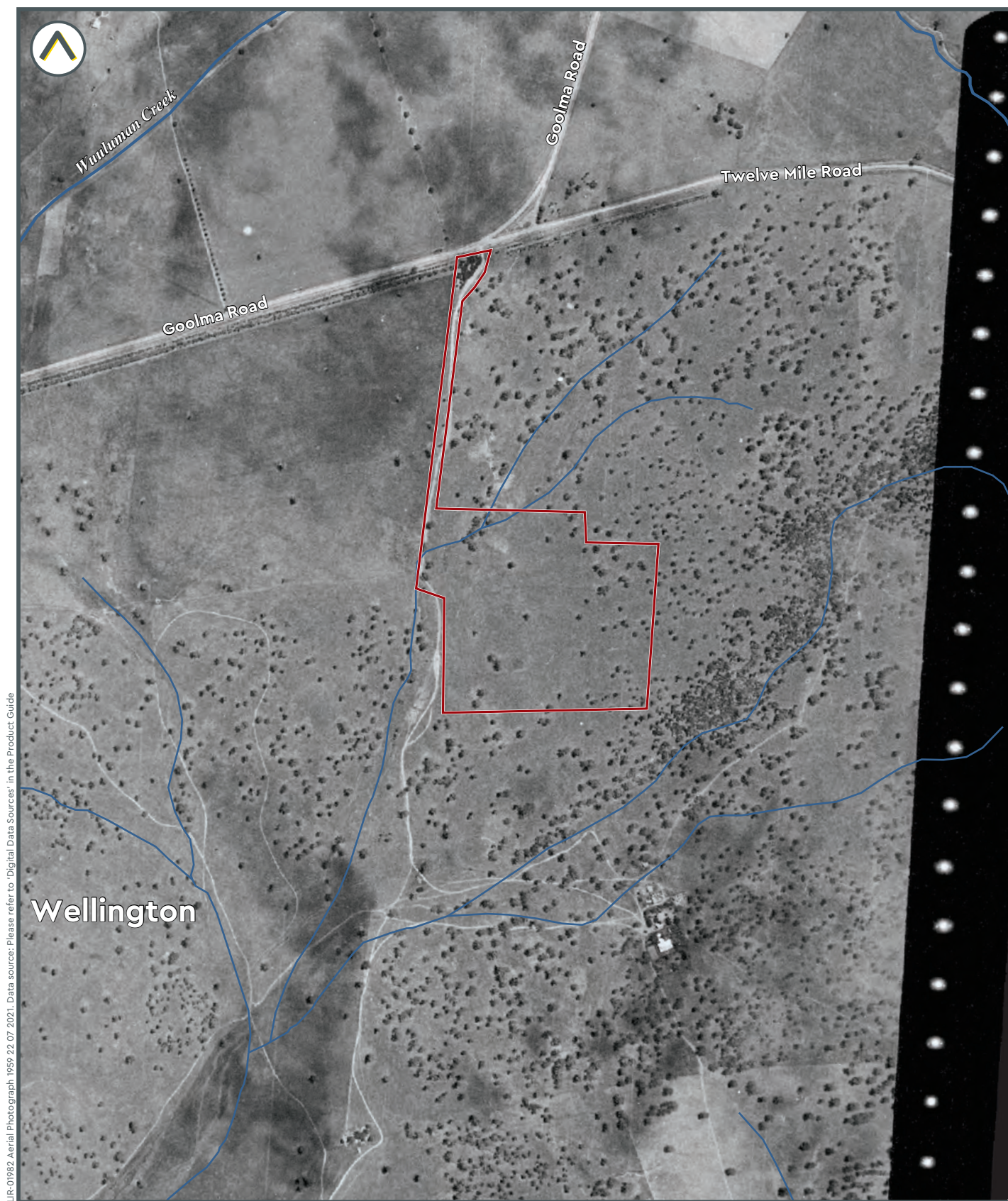
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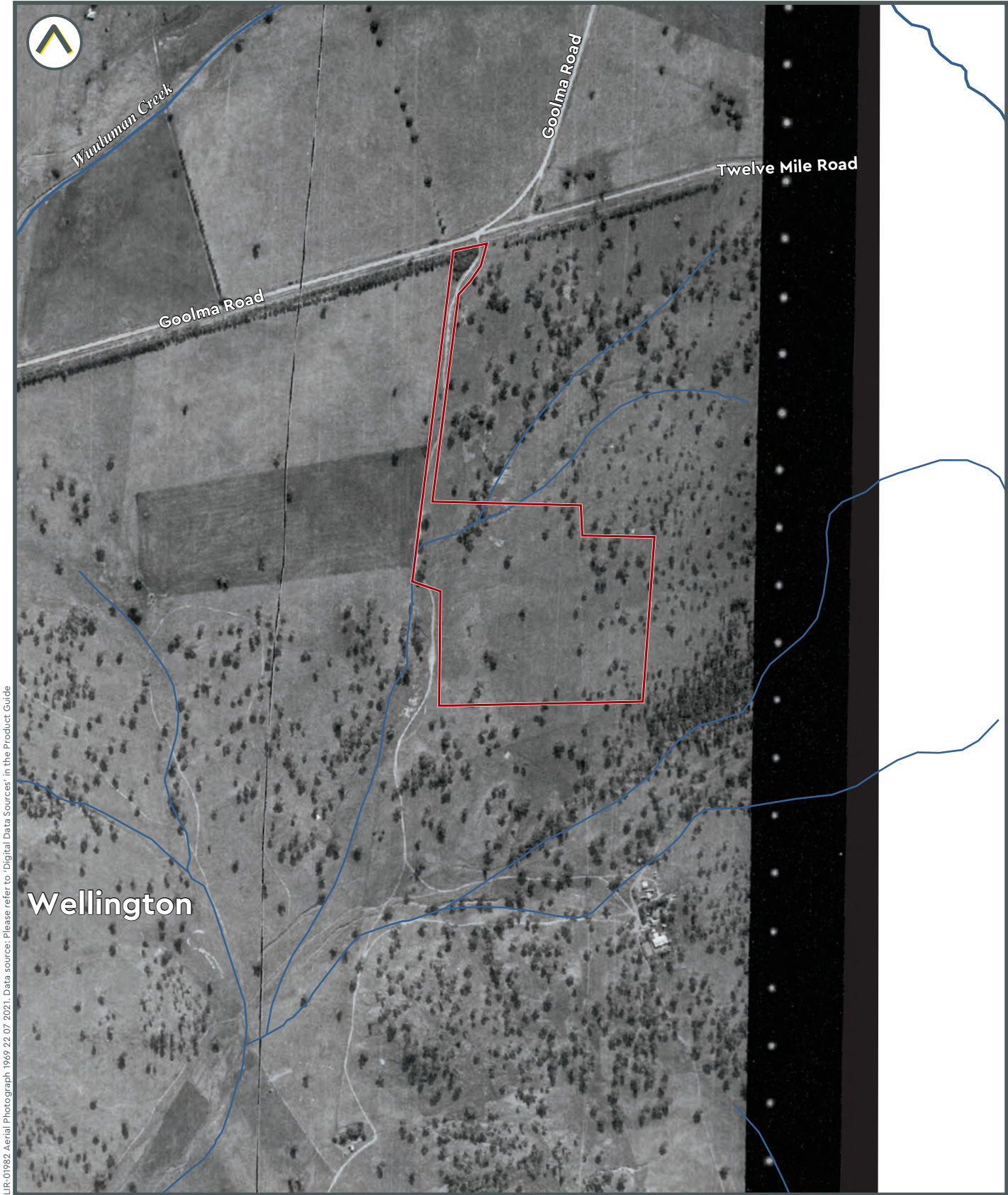
Appendix C

Historical aerial photographs

Historic Aerial Photograph - 1959



Historic Aerial Photograph - 1969

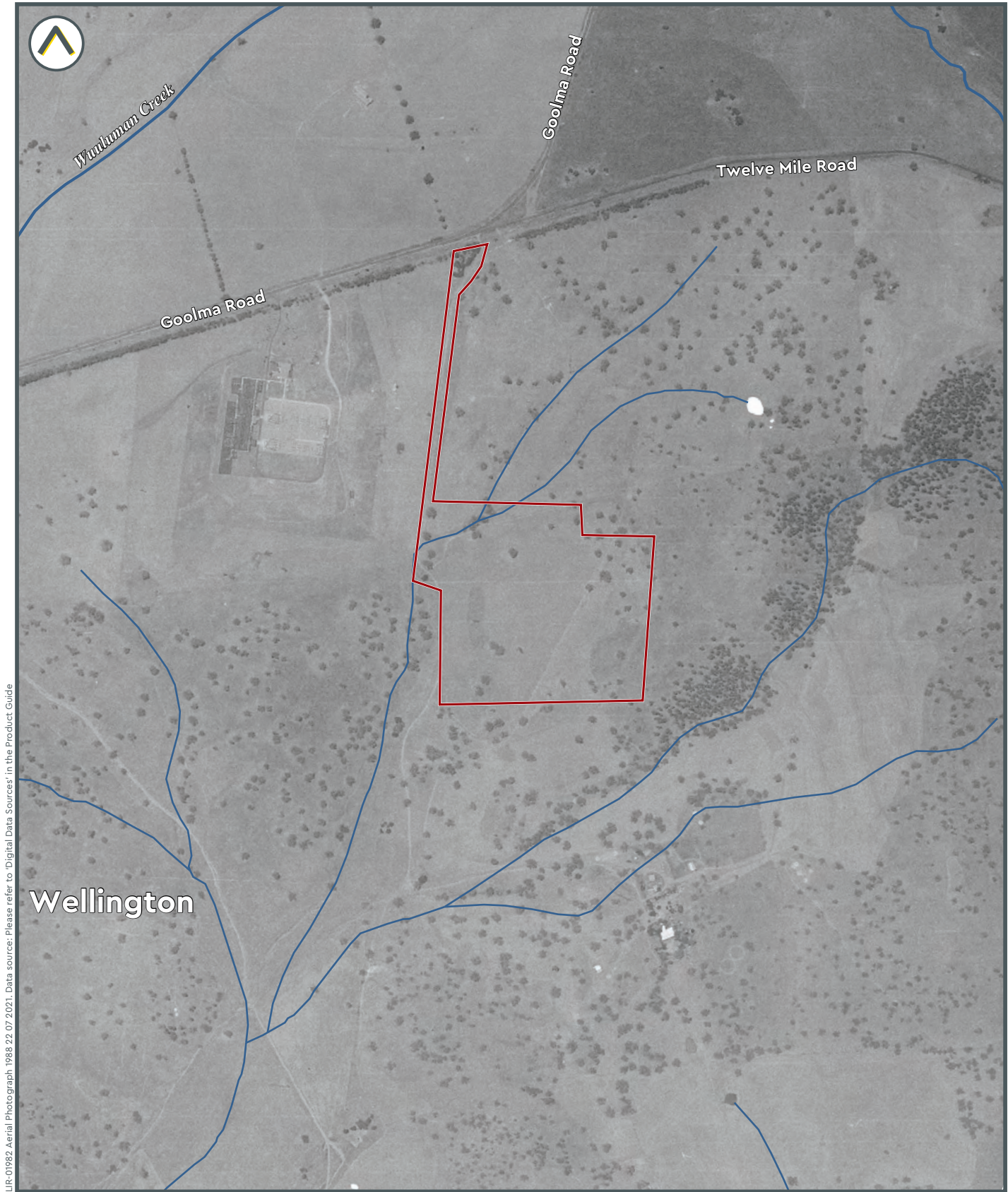


LIR-01982 Aerial Photograph 1969 22 07 2021. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Subject area

0 400m

Historic Aerial Photograph - 1988



Subject area

0 400m

Historic Aerial Photograph - 1995



LIR-01982 Aerial Photograph 1995 22 07 2021. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Subject area

0 400m



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Historic Aerial Photograph - 2004



LIR-01982 Aerial Photograph 2004 22 07 2021 Data source: Please refer to 'Digital Data Sources' in the Product Guide

Subject area

0 400m

Historic Aerial Photograph - 2007



LIR-01982 Aerial Photograph 2007 22 07 2021. Data source: Please refer to 'Digital Data Sources' in the Product Guide

 Subject area

0 400m

Historic Aerial Photograph - 2010



LIR-01982 Aerial Photograph 2007 22 07 2021. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Subject area

0 400m

Historic Aerial Photograph - 2015



 Subject area

0 400m

Historic Aerial Photograph - 2019



LIR-01982 Aerial Photograph 2019 22 07 2021. Data source: Please refer to 'Digital Data Sources' in the Product Guide

Appendix D

Additional archaeological information

D.1 Site definitions and recording methods used for this assessment

D.1.1 Aboriginal sites

In the AHIMS database, Aboriginal sites are defined in several ways. At the simplest level, sites are recorded as 'closed' or 'open'. Closed sites are associated with rockshelters and include other evidence of Aboriginal occupation that may be present, such as areas where subsurface Aboriginal objects may occur within the shelter ('potential archaeological deposit' (PAD)), faunal remains, and art on the shelter walls (paintings/engravings). Open sites are broadly defined and encompass all other types of Aboriginal site features that are located in areas where there is no rockshelter. The most common open site features found generally include artefacts, grinding grooves, art, culturally modified trees, and shell deposits (middens) (OEH 2012). The presence or absence of stone artefacts is often a defining factor in site identification, with almost every site likely to have at least some associated artefacts, as discard or loss of this most ubiquitous and practically indestructible marker of past Aboriginal visitation.

Any one site (or group of linked sites described as a 'complex') can contain several different site features. For example, a shelter may have art on the walls, artefacts on the floor surface or outside the shelter, and be predicted to contain faunal remains and further artefacts in the accumulated deposit inside.

A description of terms used to describe different site features known to occur in the vicinity of the project area is provided in Table D.1 and use definitions provided by OEH and those adopted by EMM in their field investigations to ensure consistency in recording. Similarly, there may be places of contemporary significance to Aboriginal people in the region and that will require consultation with this community to identify.

Table D.1 Site definitions and recording

Site feature	Definition and recording methods
Aboriginal ceremony and Dreaming	Previously referred to as mythological sites these are spiritual/story places where no physical evidence of previous use of the place may occur, e.g., natural unmodified landscape features, ceremonial or spiritual areas, men's/women's sites, dreaming (creation) tracks, marriage places etc.
Artefact site (open stone artefact site)	<p>Objects such as stone tools, and associated flaked material, spears, manuports, grindstones, discarded stone flakes, modified glass or shell demonstrating evidence of use of the area by Aboriginal people.</p> <p>Open stone artefact sites were defined by the presence of one (isolated find) or more (artefact scatter) stone artefacts visible on the ground surface. The boundaries of a site are limited to the spatial extent of the visible stone artefacts. The mapped site points and/or 'site areas' do not represent the areas of potential archaeological deposit (PAD) that also apply to some sites (refer to the term 'PAD' below).</p> <p>Open stone artefact sites were recorded by marking each artefact location or each cluster of artefacts within a 5 m radius as a separate waypoint in the GPS. Site boundaries were allocated by drawing a line around the cluster waypoints for each site using ArcGIS software. Stone artefacts more than 50 m apart were recorded as separate sites. EMM acknowledges that the 50 m rule applied here is an arbitrary distinction for site boundaries and is used mainly for efficiencies in site management and to establish consistency in site recording methods</p>
Burials	A traditional or contemporary (post-contact) burial of an Aboriginal person, which may occur outside designated cemeteries and may not be marked, e.g., in caves, marked by stone cairns, in sand areas, along creek banks etc.

Table D.1 **Site definitions and recording**

Site feature	Definition and recording methods
Fish trap	A modified area on watercourses where fish were trapped for short-term storage and gathering.
Grinding grooves	Grinding grooves were defined as an area of outcropping bedrock containing evidence of one or more grinding grooves where ground-stone hatchets or other grinding practices (ie seed grinding) were implemented.
Habitation structure	Structures constructed by Aboriginal people for short- or long-term shelter. More temporary structures are commonly preserved away from the NSW coastline, may include historic camps of contemporary significance. Smaller structures may make use of natural materials such as branches, logs and bark sheets or manufactured materials such as corrugated iron to form shelters. Archaeological remains of a former structure such as chimney/fireplace, raised earth building platform, excavated pits, rubble mounds etc.
Modified tree (carved or scarred)	<p>Trees which show the marks of modification as a result of cutting of bark from the trunk for use in the production of shields, canoes, boomerangs, burials shrouds, for medicinal purposes, foot holds etc., or alternately intentional carving of the heartwood of the tree to form a permanent marker to indicate ceremonial use/significance of a nearby area, again these carvings may also act as territorial or burial markers.</p> <p>Modified trees (either carved or scarred) can be difficult to identify. Scars commonly occur on trees through natural processes such as branch tears, insect damage, storm and fire damage and faunal damage. Scars can also occur from mechanical damage from vehicles or farming equipment.</p> <p>The attributes of potential scarred trees were discussed during the survey amongst archaeologists and RAPs before it was decided if a scar would be recorded or not. A precautionary approach was adopted, whereby some of the more ambiguous examples were recorded anyway. The assessment of scar trees was made from the experience of the survey team and the guideline Aboriginal scarred trees in New South Wales: a field manual (DEC 2005). In some of the more ambiguous examples, it cannot be verified whether some scars recorded during the survey are of natural or Aboriginal origin. In such instances, an expert evaluation by a scar tree expert (aborist or other) would be required to determine the status of certain trees.</p>

Table D.1 **Site definitions and recording**

Site feature	Definition and recording methods
Potential archaeological deposit (PAD)	<p>An area where Aboriginal objects may occur below the ground surface.</p> <p>The term ‘potential archaeological deposit’ was first applied in Sydney regional archaeology in the 1980s, and referred to rockshelters that were large enough and contained enough accumulated deposit to allow archaeologists to predict that subsurface cultural material was likely to be present. Since then the term has come to include open sites where the same prediction can be made.</p> <p>EMM has defined PADs as the predicted extent of concentrated subsurface Aboriginal objects in a particular area. PADs are not technically Aboriginal sites until, and if, subsurface Aboriginal objects are identified, which is typically established through archaeological test excavation. PAD areas have been assigned to landforms that are distinguishable from the surrounding landscape (eg elevated areas with good outlook overlooking watercourses) as being likely to retain higher artefact densities than the assumed ‘background scatter’ of archaeological material in the broader landscape.</p> <p>The identification of PADs associated with Aboriginal open camp sites was partly based on observations in the field and discussions with RAPs, but also related to the predictive model. Although PAD was attributed to areas for a variety of reasons, the main qualifiers were:</p> <ul style="list-style-type: none"> • The presence of surface artefacts or other Aboriginal objects. Ground surface visibility as part of the archaeological survey effort was typically considered high enough in each PAD area to identify at least one or more surface artefacts thereby indicating likelihood of subsurface potential. Notwithstanding, finding no visible surface artefacts in an area would not disqualify an area from being attributed with PAD. • Level to gently inclined ground (<10%) indicating suitable camping or activity areas. • Contours that distinguish the landforms with PAD from the surrounding landscape (eg spur crest, hill crest or knoll). Landform boundaries were also interpreted through observations in the field. Notably, rocky crest landforms that were protected from intensive cultivation were often attributed with PAD. • Proximity to water: typically up to 100 m from 1st and 2nd order streams and up to 200 m from 3rd order streams and above. Elevated landforms at the confluence of higher order streams were also more likely to be attributed with PAD. <p>EMM acknowledges that all PAD areas have been historically cleared of native vegetation and some have been subject to pasture improvements such as ploughing. As such, the term PAD does not assume high subsurface integrity; instead it is a prediction of potential subsurface artefact concentrations.</p> <p>All stone quarry sites are predicted to have PAD. The assumption is that in most cases the visible surface material at quarries is represented by larger artefacts (such as cores) and that smaller material (eg flakes) is likely to be buried.</p>
Restricted	<p>Site information contained in the Aboriginal Heritage Information Management System is available only to certain authorised groups of people, as requested by the Aboriginal community. Detailed information may not be available in search reports.</p>
Shell	<p>An accumulation or deposit of shellfish from beach, estuarine, lacustrine or riverine species resulting from Aboriginal gathering or consumption. Usually found in deposits previously referred to as shell middens. Must be found in association with other objects like stone tools, fish bones, charcoal, fireplaces/hearths, and burials. Will vary greatly in size and composition.</p>
Stone quarry	<p>Usually a source of good quality stone which is quarried and used for the production of stone tools.</p> <p>Stone quarries represent where Aboriginal people gathered raw stone materials for stone tools and/or manufactured stone tools from the adjacent source material. Quarry sites are found at rock outcrops where the material was of suitable quality to have been used to manufacture stone tools. Stone quarries were defined by the presence of outcropping stone material with nearby evidence of the same material type used in the stone tool manufacture process. This was most commonly indicated by large stone cores or stone flakes distributed amongst the same naturally outcropping material.</p> <p>EMM acknowledges that the ‘open stone artefact’ site type shares some of the same characteristics as ‘stone quarries’, such as the presence of stone artefacts. However, they have been distinguished from each other because quarries can not only represent open camping activities, but also a fixed location where Aboriginal people needed to visit to extract a resource. In contrast, the location of typical open camp sites were not fixed, but chosen by Aboriginal people for their favourable conditions.</p>

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
36-4-0138	Wellington Solar Farm IF8	GDA	55	684144	6400422	Open site	Destroyed	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshw Permits							
36-4-0118	Power Station CMT 2	GDA	55	684191	6398780	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	Contact	Recorders	Doctor.Colin Pardoe Permits							
36-4-0149	Wellington Solar Farm AS6	GDA	55	684331	6400473	Open site	Destroyed	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshw Permits							
36-1-0126	Curra Creek;	AGD	55	680110	6394170	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	1333
	Contact	Recorders	Warren Bluff Permits							
36-4-0177	Wellington Nth IF2	GDA	55	682214	6400473	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,NGH Heritage - Fyshwick Permits							
36-4-0154	Wellington Solar Farm ST1	GDA	55	683726	6401020	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact	Recorders	Mr.Matthew Barber,NGH Heritage - Fyshwick Permits							
36-4-0222	Mount Nanima IF1	GDA	55	684119	6397585	Open site	Valid	Artefact : -		
	Contact	Recorders	Eco Logical Australia Pty Ltd - Sydney - Individual users,Mr.Declan Coman Permits							
36-4-0136	Wellington Solar Farm IF12	GDA	55	684501	6400245	Open site	Destroyed	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshw Permits							
36-4-0135	Wellington Solar Farm IF13	GDA	55	684554	6400033	Open site	Destroyed	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshw Permits							
36-4-0203	Wellington Nth SF Additional Area IF1	GDA	55	684764	6399721	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshwick,NGH Heritage - F Permits							
36-4-0006	Macquarie River 2	AGD	55	682701	6396153	Open site	Valid	Modified Tree (Carved or Scarred) : 28, Ceremonial Ring (Stone or Earth) : -	Bora/Ceremonial,Carved Tree	65,102779
	Contact	Recorders	David Bell,R Etheridge Permits							
36-4-0158	Wellington Solar Farm IF4	GDA	55	683642	6400795	Open site	Destroyed	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshw Permits							
36-4-0210	Wellington Solar IF 17	GDA	55	683991	6400184	Open site	Destroyed	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshwick,NGH Heritage - F Permits							
36-4-0216	WE-IF-001 (Goolma Road)	GDA	55	684088	6399493	Open site	Valid	Artefact : -		
	Contact	Recorders	Kayandel Archaeological Services,Ms.Natalie Stiles Permits							

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : J210534 Wellington

Client Service ID : 609448

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
36-4-0117	Power Station CMT 1	GDA	55	684165	6398827	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	Contact									
	Gallanggambang Aboriginal Corp									
	Recorders									
	Doctor.Colin Pardoe									
36-4-0079	Wellington	AGD	55	682000	6397000	Open site	Valid	Burial : -	Burial/s	2641,102779
	Contact									
	Recorders									
	Ms.Adrienne Howe-Piening									
36-4-0173	Wellington Nth AFT1	GDA	55	682573	6401365	Open site	Valid	Artefact : -		
	Contact									
	Recorders									
	Mr.Matthew Barber,NGH Heritage - Fyshwick									
36-4-0142	Wellington Solar Farm IF1	GDA	55	682740	6401252	Open site	Valid	Artefact : -		
	Contact									
	Recorders									
	Mr.Matthew Barber,NGH Heritage - Fyshwick									
36-4-0147	Wellington Solar Farm AS3	GDA	55	683565	6400929	Open site	Destroyed	Artefact : -		
	Contact									
	Recorders									
	Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshwick,NGH Heritage - F									
36-4-0153	Wellington Solar Farm AS10	GDA	55	683546	6399549	Open site	Destroyed	Artefact : -		
	Contact									
	Recorders									
	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshw									
36-4-0146	Wellington Solar Farm AS4	GDA	55	683623	6400932	Open site	Destroyed	Artefact : -		
	Contact									
	Recorders									
	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshw									
36-4-0159	Wellington Solar Farm IF5	GDA	55	683677	6400457	Open site	Destroyed	Artefact : -		
	Contact									
	Recorders									
	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshw									
36-4-0148	Wellington Solar Farm AS5	GDA	55	684194	6400396	Open site	Destroyed	Artefact : -		
	Contact									
	Recorders									
	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshw									
36-4-0221	Mount Namina AS1	GDA	55	684262	6396829	Open site	Valid	Artefact : -		
	Contact									
	Recorders									
	Eco Logical Australia Pty Ltd - Sydney - Individual users,Mr.Declan Coman									
36-4-0220	UWFTMR_IF1	GDA	55	685171	6399910	Open site	Valid	Artefact : -		
	Contact									
	Recorders									
	Austral Archaeology - Wollongong,Mr.Ricardo Servin									
36-4-0025	Wellington;WF 1;Baalbek;	AGD	55	679980	6399950	Open site	Valid	Artefact : -	Open Camp Site	975,102779
	Contact									
	Recorders									
	Mr.Allan Lance									
36-4-0176	Wellington Nth IF1	GDA	55	682306	6400402	Open site	Valid	Artefact : -		
	Contact									
	Recorders									
	Mr.Matthew Barber,NGH Heritage - Fyshwick									
36-4-0156	Wellington Solar Farm IF3	GDA	55	683394	6400771	Open site	Destroyed	Artefact : -		
	Contact									
	Recorders									
	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshw									
36-4-0150	Wellington Solar Farm AS7	GDA	55	684252	6400282	Open site	Destroyed	Artefact : -		
	Contact									
	Recorders									
	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshw									
36-4-0137	Wellington Solar Farm IF11	GDA	55	684439	6400296	Open site	Valid	Artefact : -		
	Contact									
	Recorders									
	Mr.Matthew Barber,NGH Heritage - Fyshwick									
36-4-0128	Blacks Camp Wellington	GDA	55	685616	6395743	Open site	Valid	Artefact : -		103476
	Contact									
	Recorders									
	Phil Purcell									

Report generated by AHIMS Web Service on 02/08/2021 for Taylar Reid for the following area at Lat, Long From : -32.58, 148.91 - Lat, Long To : -32.51, 149.03. Number of Aboriginal sites and Aboriginal objects found is 55

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

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : J210534 Wellington

Client Service ID : 609448

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
36-4-0108	Yarrahapani 1	AGD	55	686370	6398880	Open site	Valid	Artefact : 2		101380,102779
	Contact	Recorders	Mr.Neville Baker,Doctor.Jodie Benton,Gallangabang Aboriginal Corporation					Permits		
36-5-0222	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid			
	Contact	Recorders	Austral Archaeology - Wollongong,Mr.Ricardo Servin					Permits		
36-4-0092	PR-ST-01 same as 36-1-0126	AGD	55	680110	6394170	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact	Recorders	L Nolan					Permits		
36-4-0141	Wellington Solar Farm IF7	GDA	55	683989	6400395	Open site	Destroyed	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshw					Permits		
36-4-0218	Wellington Solar IF 18	GDA	55	684051	6400406	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,NGH Heritage - Fyshwick					Permits		
36-4-0139	Wellington Solar Farm IF9	GDA	55	684628	6400510	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,NGH Heritage - Fyshwick					Permits		
36-4-0077	Nanima Rd 1;	AGD	55	684490	6394100	Open site	Valid	Modified Tree (Carved or Scarred) : 1	Scarred Tree	3701,102779
	Contact	Recorders	Mr.Matthew Barber					Permits		
36-4-0097	STP-1F-1	AGD	55	680780	6396810	Open site	Valid	Artefact : -		102779
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd					Permits		
36-4-0081	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid			102211,102779
	Contact	Recorders	Lloyd Nolan,Mr.Bradley Bliss,Wellington Valley Wiradjuri Aboriginal Corporation					Permits		
36-4-0171	Wellington Nth IF6	GDA	55	682629	6401320	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,NGH Heritage - Fyshwick					Permits		
36-4-0143	Wellington Solar Farm IF15	GDA	55	683583	6399737	Open site	Destroyed	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshw					Permits		
36-4-0214	Wellington Solar AS 13	GDA	55	683672	6399764	Open site	Destroyed	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshwick,NGH Heritage - F					Permits		
36-4-0211	Wellington Solar IF 16	GDA	55	683706	6399911	Open site	Destroyed	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshwick,NGH Heritage - F					Permits		
36-4-0212	Wellington Solar AS 11	GDA	55	684000	6400229	Open site	Destroyed	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshwick,NGH Heritage - F					Permits		
36-4-0152	Wellington Solar Farm AS9	GDA	55	684000	6399939	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,NGH Heritage - Fyshwick					Permits		
36-4-0140	Wellington Solar Farm IF10	GDA	55	684774	6400441	Open site	Destroyed	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshw					Permits		

Report generated by AHIMS Web Service on 02/08/2021 for Taylar Reid for the following area at Lat, Long From : -32.58, 148.91 - Lat, Long To : -32.51, 149.03. Number of Aboriginal sites and Aboriginal objects found is 55

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : J210534 Wellington

Client Service ID : 609448

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
36-4-0202	Wellington Nth SF Additional Area IF2	GDA	55	685619	6399925	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshwick,NGH Heritage - F							
36-4-0090	W/STP-ST-1	AGD	55	680750	6397060	Open site	Valid	Modified Tree (Carved or Scarred) : 1		97979,102779
	<u>Contact</u>	<u>Recorders</u>	Jim Kelton							
36-4-0155	Wellington Solar Farm IF2	GDA	55	682805	6400601	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Mr.Matthew Barber,NGH Heritage - Fyshwick							
36-4-0213	Wellington Solar AS 12	GDA	55	683560	6400035	Open site	Destroyed	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshwick,NGH Heritage - F							
36-4-0151	Wellington Solar Farm AS8	GDA	55	684389	6400526	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Mr.Matthew Barber,NGH Heritage - Fyshwick							
36-4-0201	Wellington Nth SF Additional Area IF3	GDA	55	684736	6399572	Open site	Not a Site	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshwick,NGH Heritage - F							
36-4-0074	TC 3	AGD	55	685100	6393400	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	102779
	<u>Contact</u>	<u>Recorders</u>	Doctor.Jillian Comber,D Ingray							
36-4-0219	Wellington Solar Unexpected Find Reburial 1	GDA	55	683602	6401097	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Mr.Matthew Barber,NGH Heritage - Fyshwick							

** Site Status

Valid - The site has been recorded and accepted onto the system as valid

Destroyed - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.

Partially Destroyed - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground

Not a site - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Report generated by AHIMS Web Service on 02/08/2021 for Taylar Reid for the following area at Lat, Long From : -32.58, 148.91 - Lat, Long To : -32.51, 149.03. Number of Aboriginal sites and Aboriginal objects found is 55

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

Georgia Burnett

From: David Gordon <David.Gordon@environment.nsw.gov.au>
Sent: Wednesday, 4 August 2021 11:06 AM
To: Georgia Burnett
Cc: Taylar Reid
Subject: RE: Wellington BESS - Restricted sites

CAUTION: This email originated outside of the Organisation.

Hi Georgia,

I can confirm that Restricted Aboriginal Sites:

- 36-5-0222
- 36-4-0081

WILL NOT BE IMPACTED BY ANY WORKS IN LOT 32 AND DP 622471.

Thanks

David Gordon | Senior Heritage Information Officer (Aboriginal)
Heritage NSW, Community Engagement, Department of Premier and Cabinet
Level 6, 10 Valentine Avenue, Parramatta | Locked Bag 5020, Parramatta, 2124

T: 02 9585 6467 | david.gordon@environment.nsw.gov.au



Premier
& Cabinet

I acknowledge the Traditional Custodians of the land on which
I work and live, pay my respects to Elders past and present
and recognise continued connection to country.



From: Georgia Burnett <gburnett@emmconsulting.com.au>
Sent: Monday, 2 August 2021 4:24 PM
To: CCHD Information Systems & Assessment Mailbox <ahims@environment.nsw.gov.au>
Cc: Taylar Reid <treid@emmconsulting.com.au>
Subject: Wellington BESS - Restricted sites

Hi,

A colleague undertook the attached search this morning, which came up with two restricted sites listed; I have attached a screenshot of our study area below (Lot 32 DP 622471). Could you please confirm the restricted sites do not fall in our study area please?



Thank you!
Georgia

Georgia Burnett

Archaeologist

Bushfire, Ecology, Heritage and Spatial Solutions



T 02 9493 9500

M 0459 295 806

in Connect with us

SYDNEY | Ground floor, 20 Chandos Street, St Leonards NSW 2065

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D.3 Site cards (AHIMS 36-4-0201 and AHIMS 36-4-0203)

Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville 2220 NSW

AHIMS site ID: 36-4-0201

Date recorded: 22-01-2019

Site Location Information

Site name: Wellington Nth SF Additional Area IF3

Easting: 684736 Northing: 6399572 Coordinates must be in GDA (MGA)

Horizontal Accuracy (m): 5

Zone: 55 Location method: Phone GPS

Recorder Information

(The person responsible for the completion and submission of this form)

Title Surname First name
Mr. Barber Matthew

Organisation: 75

Address: Po Box 62 Fyshwick ACT 2609

Phone: 0407485018 E-mail: matthew.b@nghenvironmental.com.au

Site Context Information

Land Form Pattern: Undulating Plain Land Use: Farming Intensive

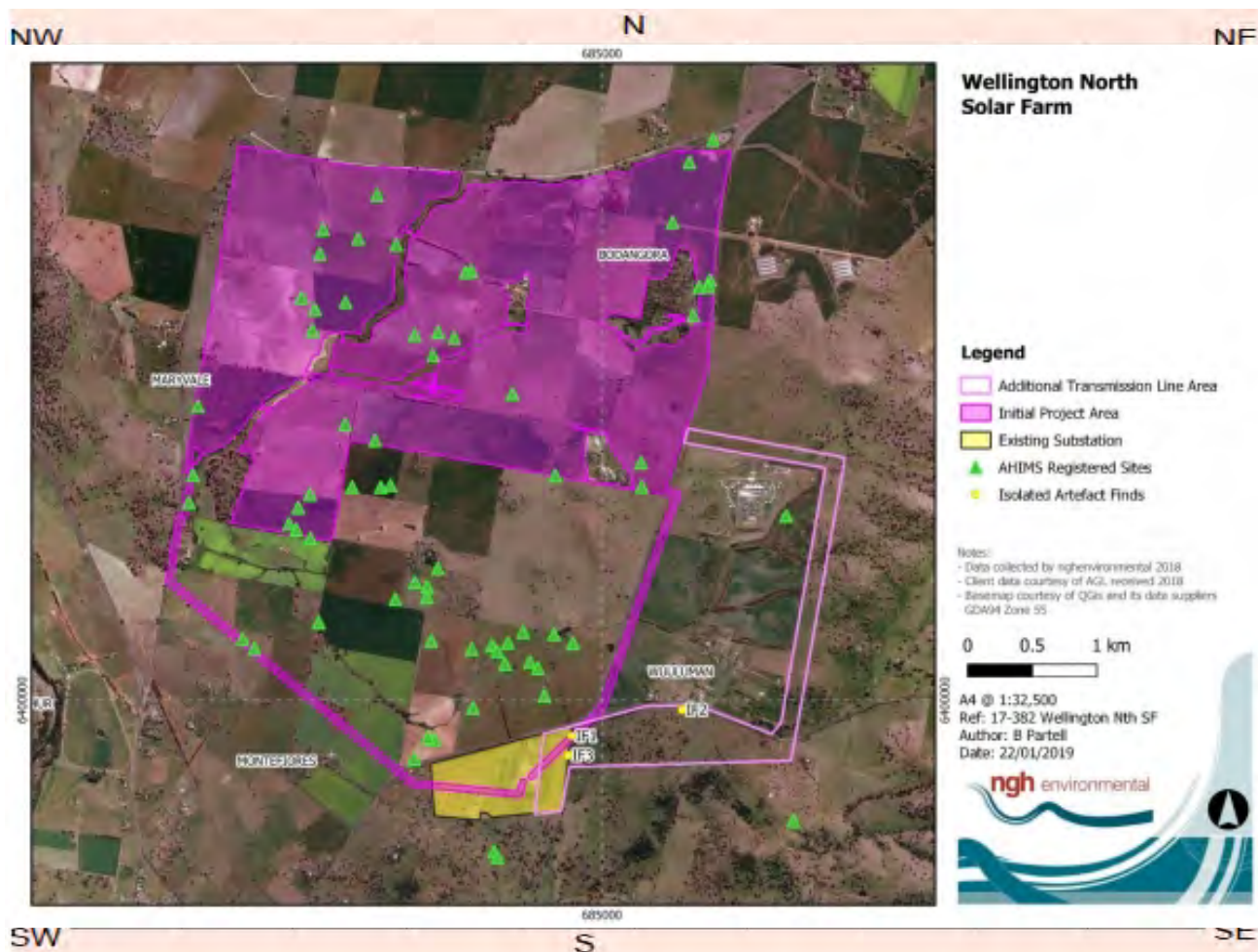
Land Form Unit: Flat Vegetation: Cleared

Distance to Water (m): 244 Primary Report:

How to get to the site: Follow Goolma Road heading north-east from Wellington town for 3.16km. The Isolated Find is 212m south of the road.

Other site information:

Site location map



Site contents information

open/closed site:

Site condition:

Features:

Features:	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)
1. <input type="text" value="Artefact"/>	<input type="text" value="1"/>	<input type="text" value="0.1"/>	<input type="text" value="0.1"/>

Description:

One isolated find.

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Features:

Features:	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)
2. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Description:

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Features:

3.

Description:

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Features:

4.

Description:

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Features:

5.

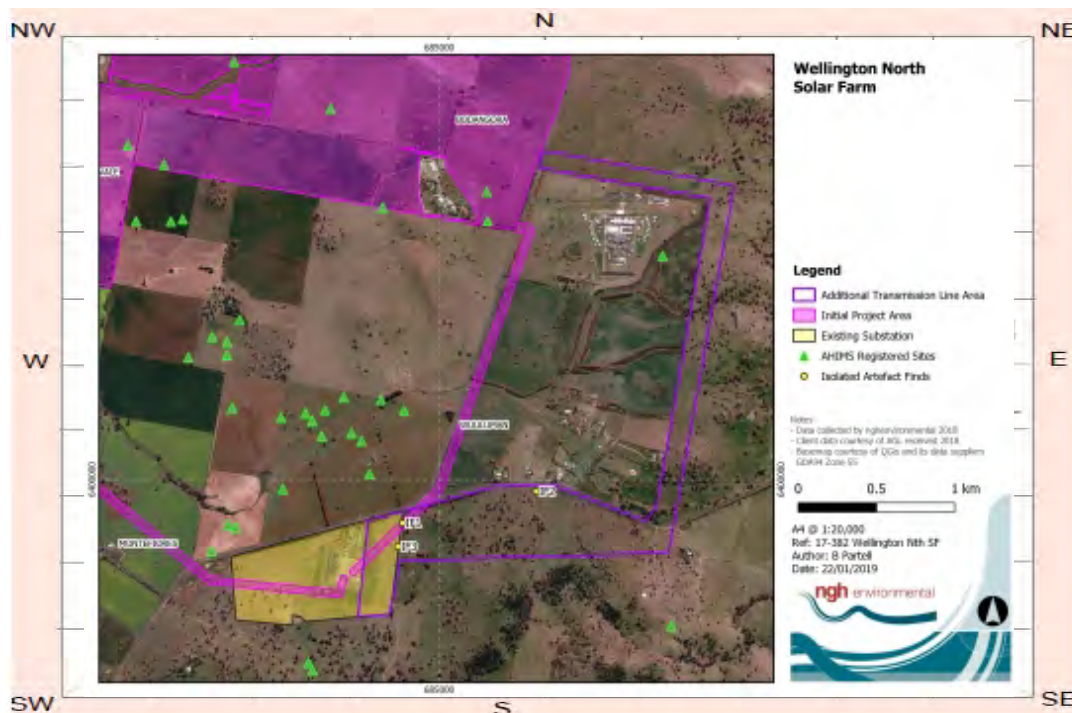
Description:

Scarred Trees

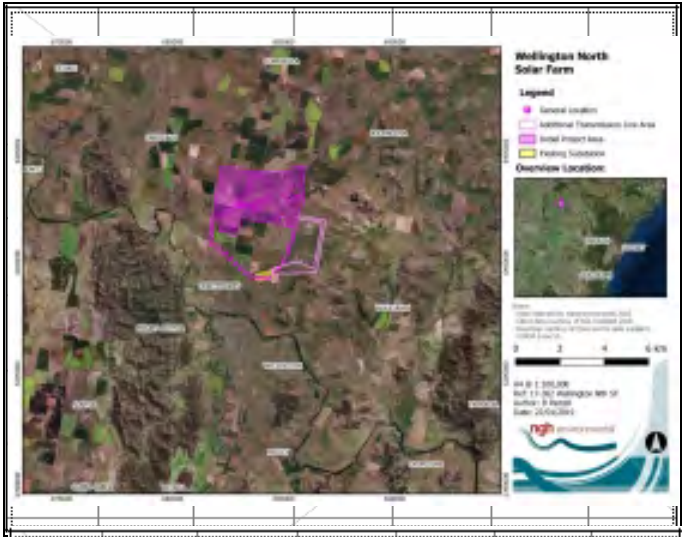
Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Other Site Info:

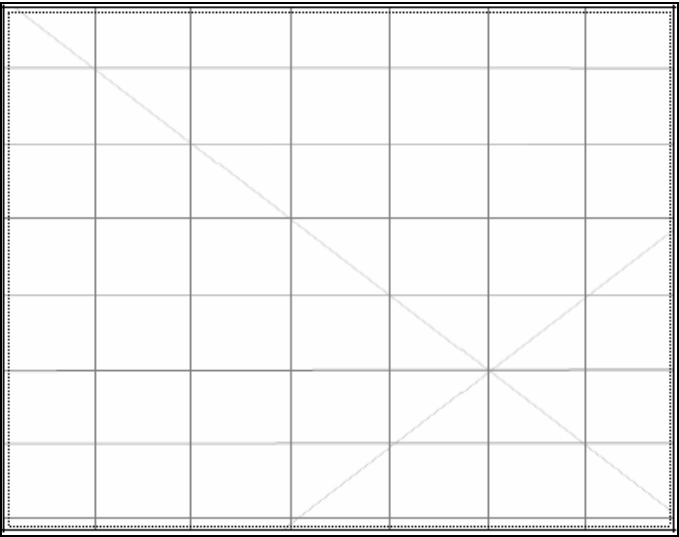
Site plan



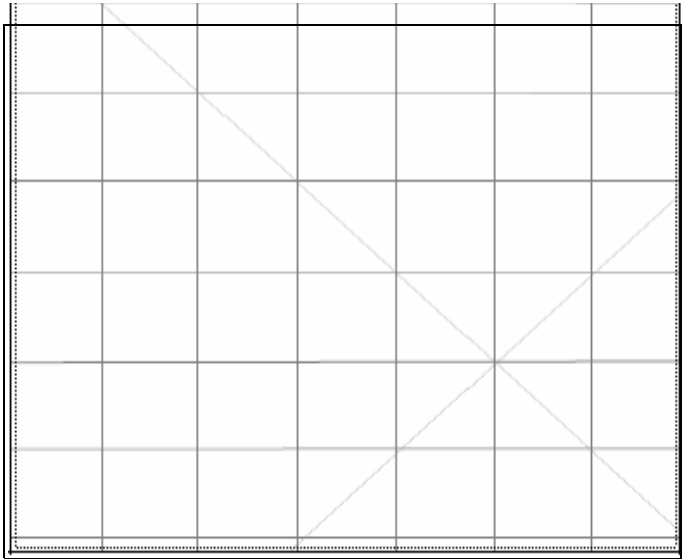
Site photographs



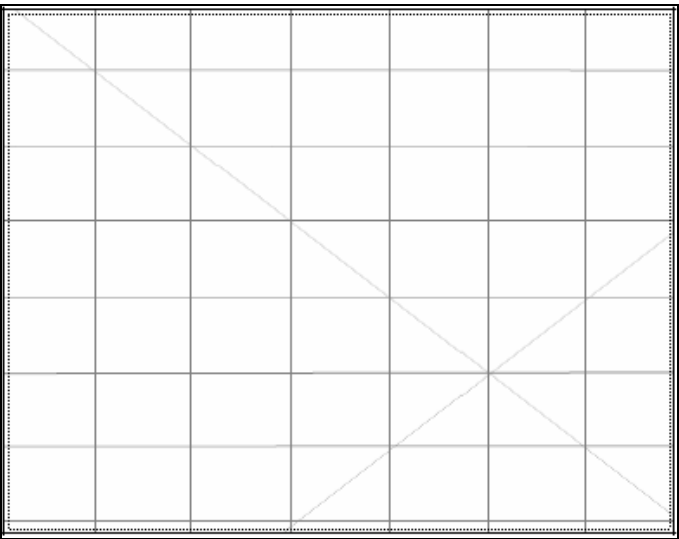
Description:



Description:



Description:



Description:

Site restrictions

Do you want to Restrict this site?:

Restriction type: Gender General Location

Why is this site restricted?:

Further information contact

Title

Surname

First name

Organisation:

Address:

Phone: E-mail:

Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville 2220 NSW

AHIMS site ID: 36-4-0201

Date recorded: 29-01-2019

Site Location Information

Site name: Wellington North SF IF31

Easting: 684736

Northing: 6399572

Coordinates must be in GDA (MGA)

Horizontal Accuracy (m):

5

Zone: 55

Location method:

Phone GPS

Recorder Information

(The person responsible for the completion and submission of this form)

Title

Surname

First name

Mr.

Barber

Matthew

Organisation: 75

Address: Po Box 62 Fyshwick ACT 2609

Phone: 0407485018

E-mail: matthew.b@nghenvironmental.com.au

Site Context Information

Land Form
Pattern:

Land Use:

Land Form
Unit:

Vegetation:

Distance to
Water (m):

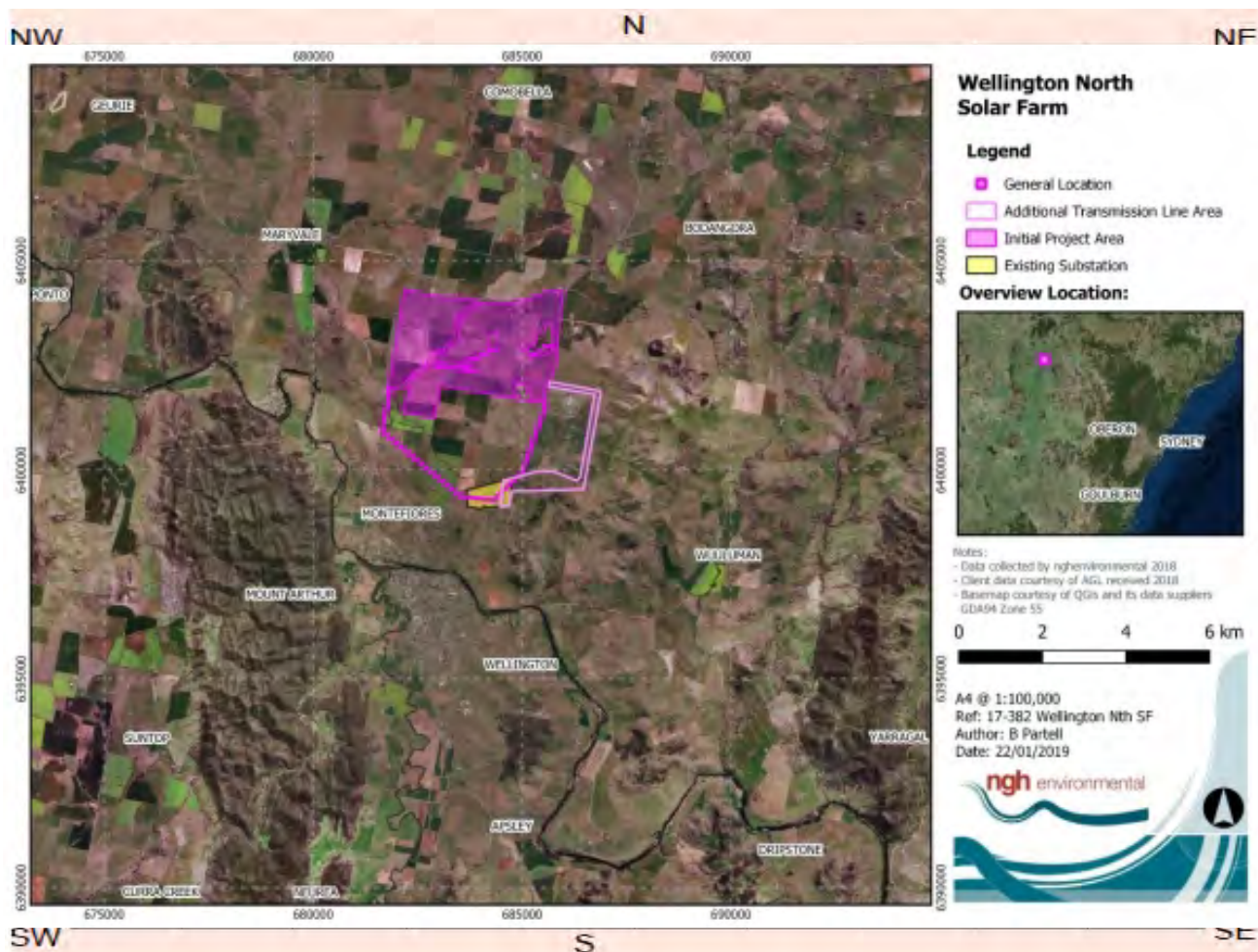
Primary
Report:

How to get
to the site:

Other site
information:

The flake was located just to the side of a row of planted exotic shrubs. The area contained red-brown soil and was located on an area of approximately 40% visibility.

Site location map



Site contents information

open/closed site:

Site condition:

Features:

	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
1. <input type="text" value="Artefact"/>	<input type="text" value="1"/>	<input type="text" value="0.1"/>	<input type="text" value="0.1"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Description:

The site consists of a red-brown tuff flake measuring 68mm in length, 45mm in width, and 17mm thickness.

Features:

	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
2. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Description:

Features:

3.

Description:

Scarred Trees			
Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Features:

4.

Description:

Scarred Trees			
Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Features:

5.

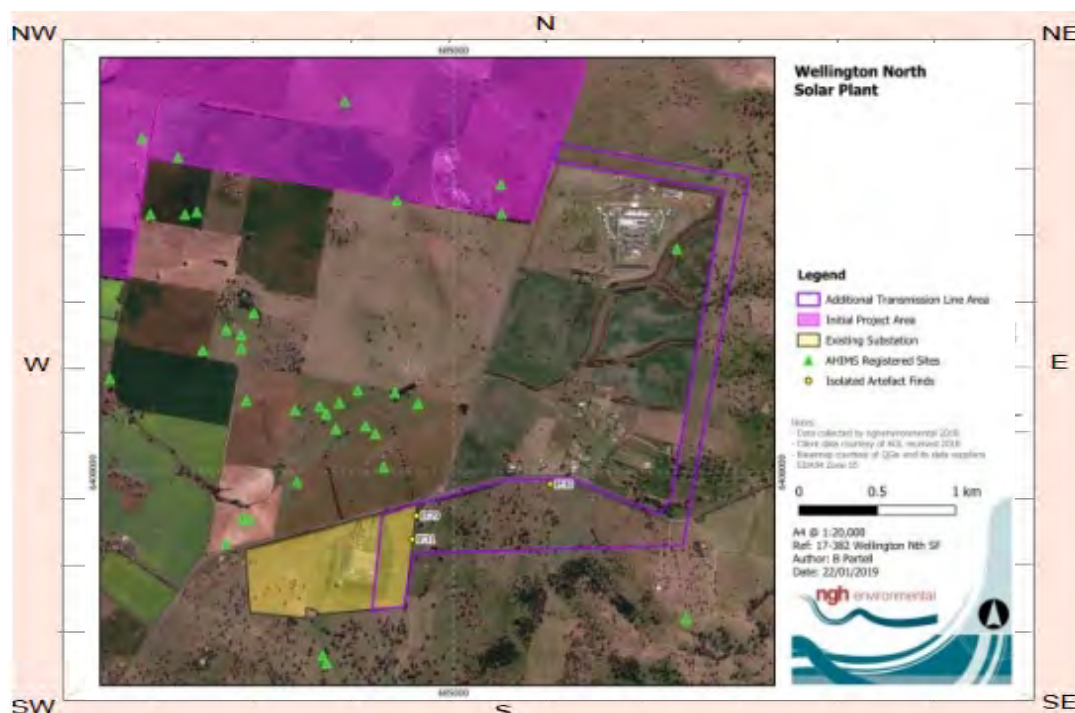
Description:

Scarred Trees			
Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

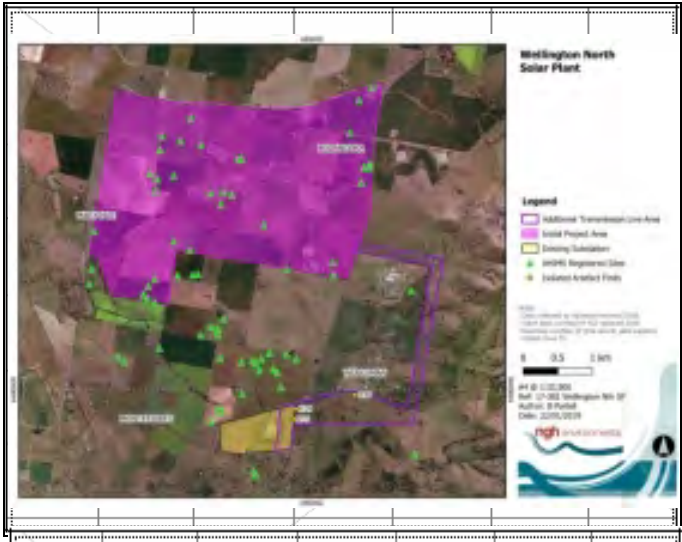
Other Site Info:

The flake was located just to the side of a row of planted exotic shrubs. The area contained red-brown soil and was located on an area of approximately 40% visibility.

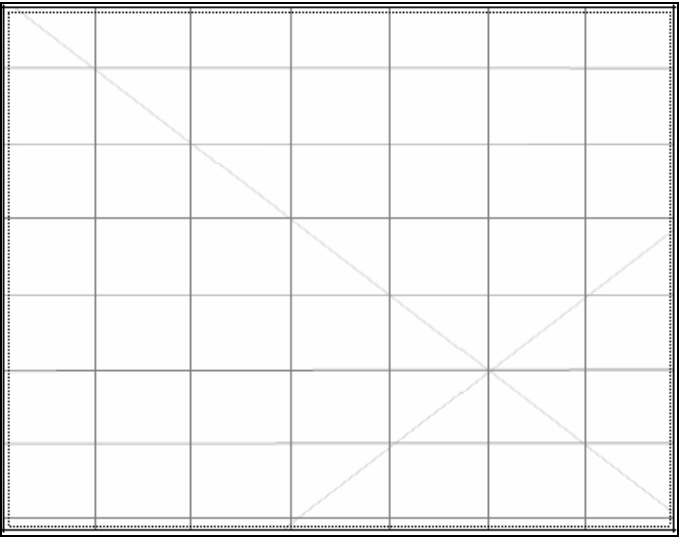
Site plan



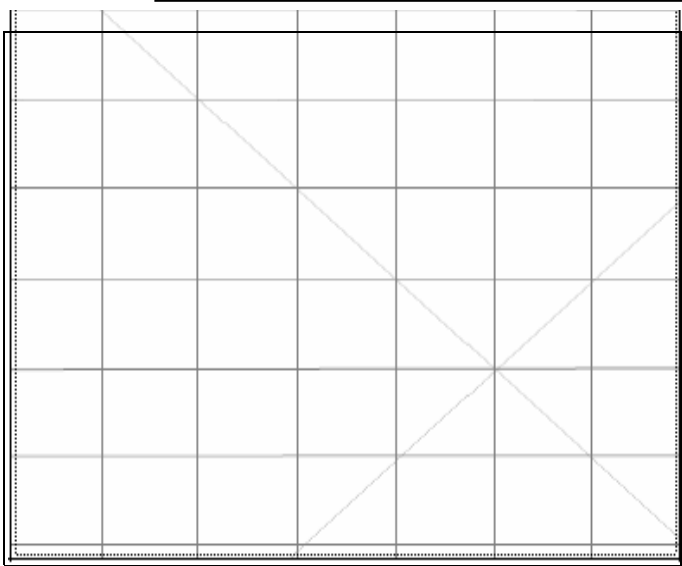
Site photographs



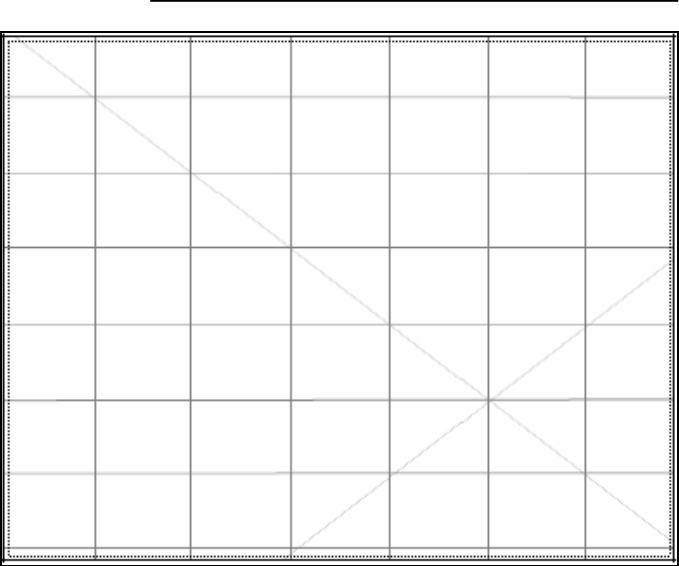
Description:



Description:



Description:



Description:

Site restrictions

Do you want to Restrict this site?:

Restriction type:

Why is this site restricted?:

Further information contact

Title Surname First name

Organisation:

Address:

Phone: E-mail:

Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville 2220 NSW

AHIMS site ID: 36-4-0203

Date recorded: 22-01-2019

Site Location Information

Site name: Wellington Nth SF Additional Area IF1

Easting: 684764 Northing: 6399721 Coordinates must be in GDA (MGA)

Horizontal Accuracy (m): 5

Zone: 55 Location method: Non-Differential GPS

Recorder Information

(The person responsible for the completion and submission of this form)

Title Surname First name
Mr. Barber Matthew

Organisation: 75

Address: Po Box 62 Fyshwick ACT 2609

Phone: 0407485018 E-mail: matthew.b@nghenvironmental.com.au

Site Context Information

Land Form Pattern: Undulating Plain Land Use: Farming Intensive

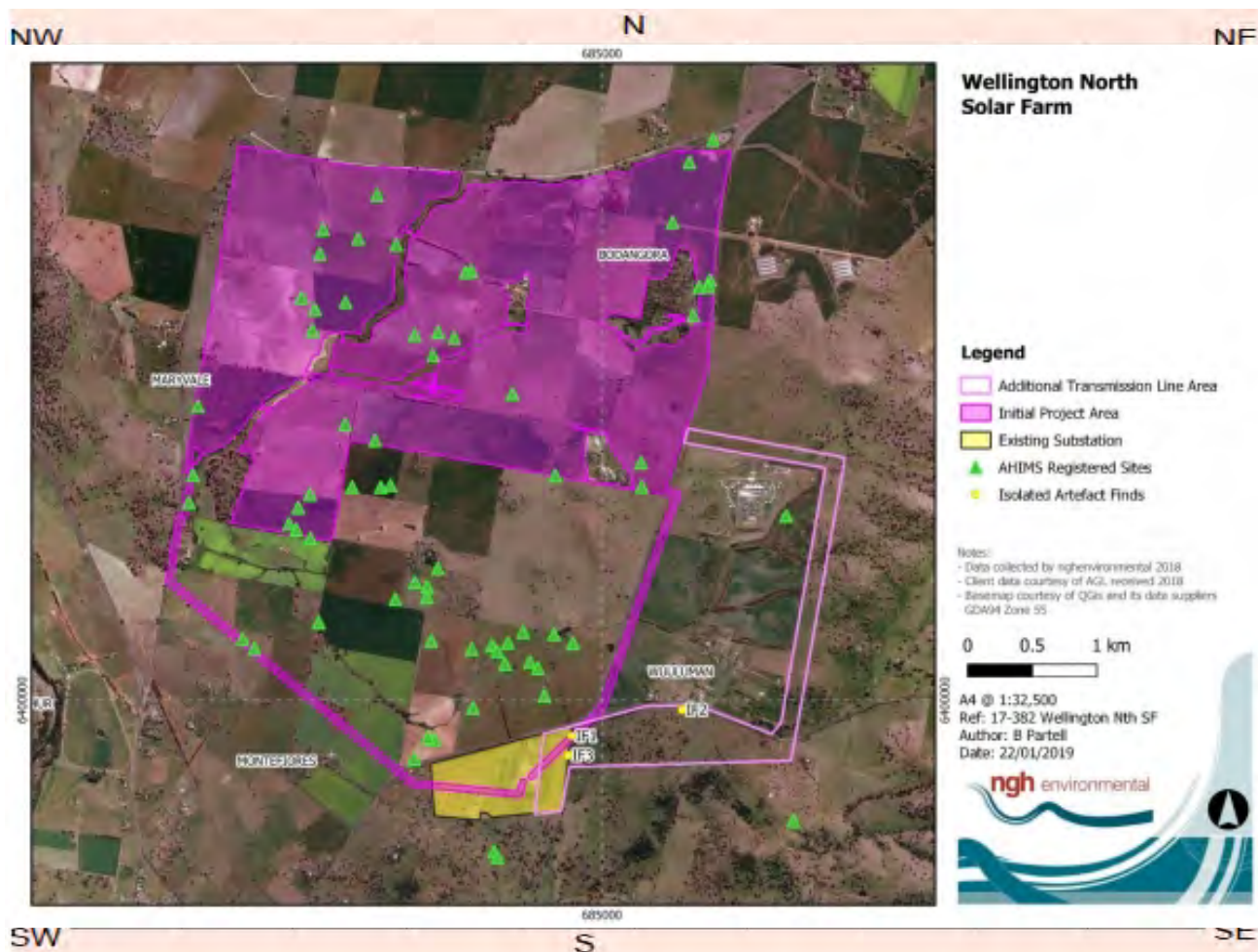
Land Form Unit: Flat Vegetation: Cleared

Distance to Water (m): 306 Primary Report:

How to get to the site: Follow Goolma Road heading north-east from Wellington town for 3.16km.
The Isolated Find is 72m south of the road.

Other site information:

Site location map



Site contents information

open/closed site:

Site condition:

Features:

Features:	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)
1. <input type="text" value="Artefact"/>	<input type="text" value="1"/>	<input type="text" value="0.1"/>	<input type="text" value="0.1"/>

Description:

One isolated yellow-orange chert rotated core, measures 106mm(L)x94mm(W)x81mm(T).

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Features:

Features:	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)
2. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Description:

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Features:

3.

Description:

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Features:

4.

Description:

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Features:

5.

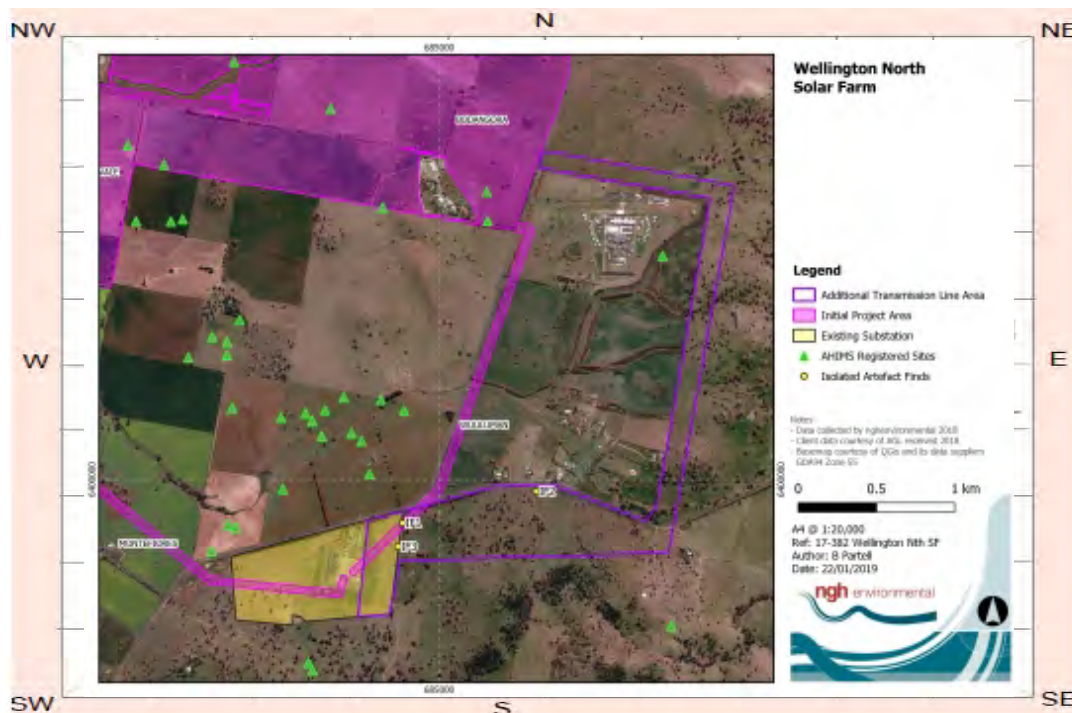
Description:

Scarred Trees

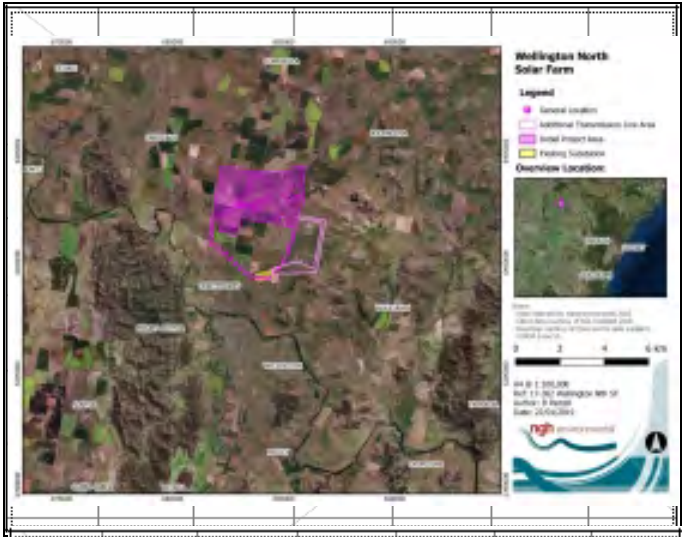
Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Other Site Info:

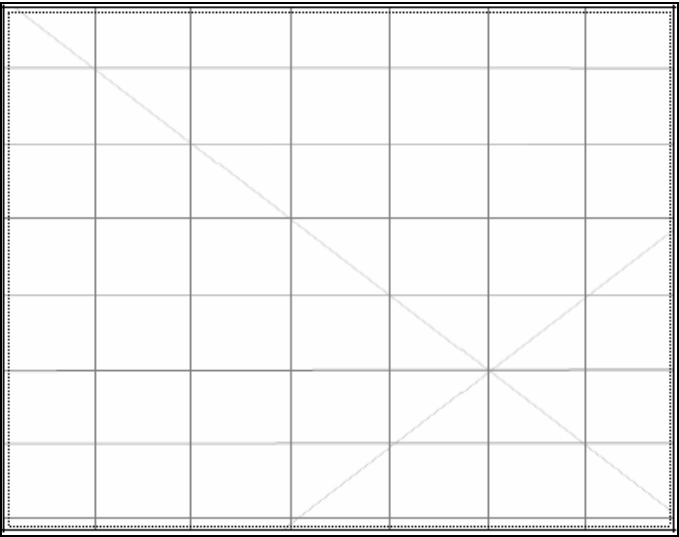
Site plan



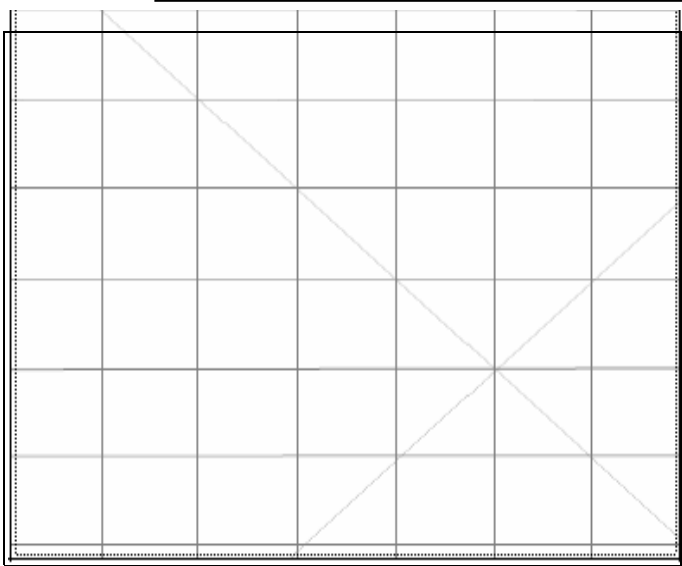
Site photographs



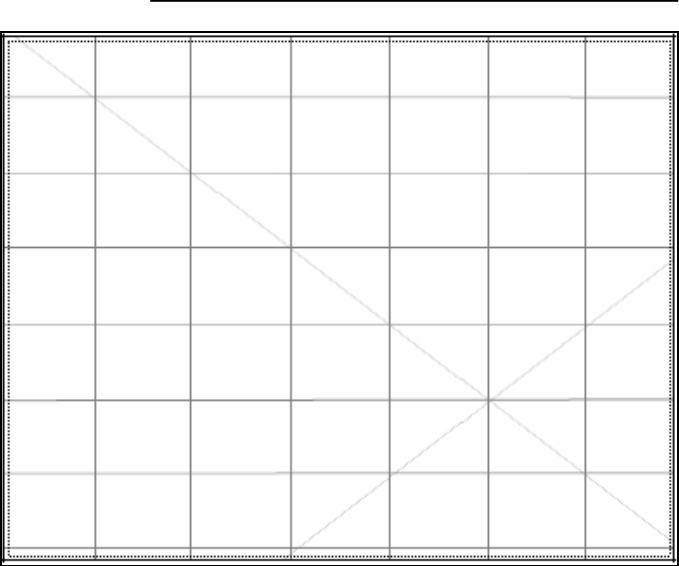
Description:



Description:



Description:



Description:

Site restrictions

Do you want to Restrict this site?:

Restriction type: Gender General Location

Why is this site restricted?:

Further information contact

Title

Surname

First name

Organisation:

Address:

Phone: E-mail:

Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville 2220 NSW

AHIMS site ID: 36-4-0203

Date recorded: 29-01-2019

Site Location Information

Site name: Wellington Nth IF 29

Easting: 684764

Northing: 6399721

Coordinates must be in GDA (MGA)

Horizontal Accuracy (m):

5

Zone: 55

Location method:

Non-Differential GPS

Recorder Information

(The person responsible for the completion and submission of this form)

Title

Surname

First name

Mr.

Barber

Matthew

Organisation: 75

Address:

Po Box 62 Fyshwick ACT 2609

Phone: 0407485018

E-mail:

matthew.b@nghenvironmental.com.au

Site Context Information

Land Form
Pattern:

Land Use:

Land Form
Unit:

Vegetation:

Distance to
Water (m):

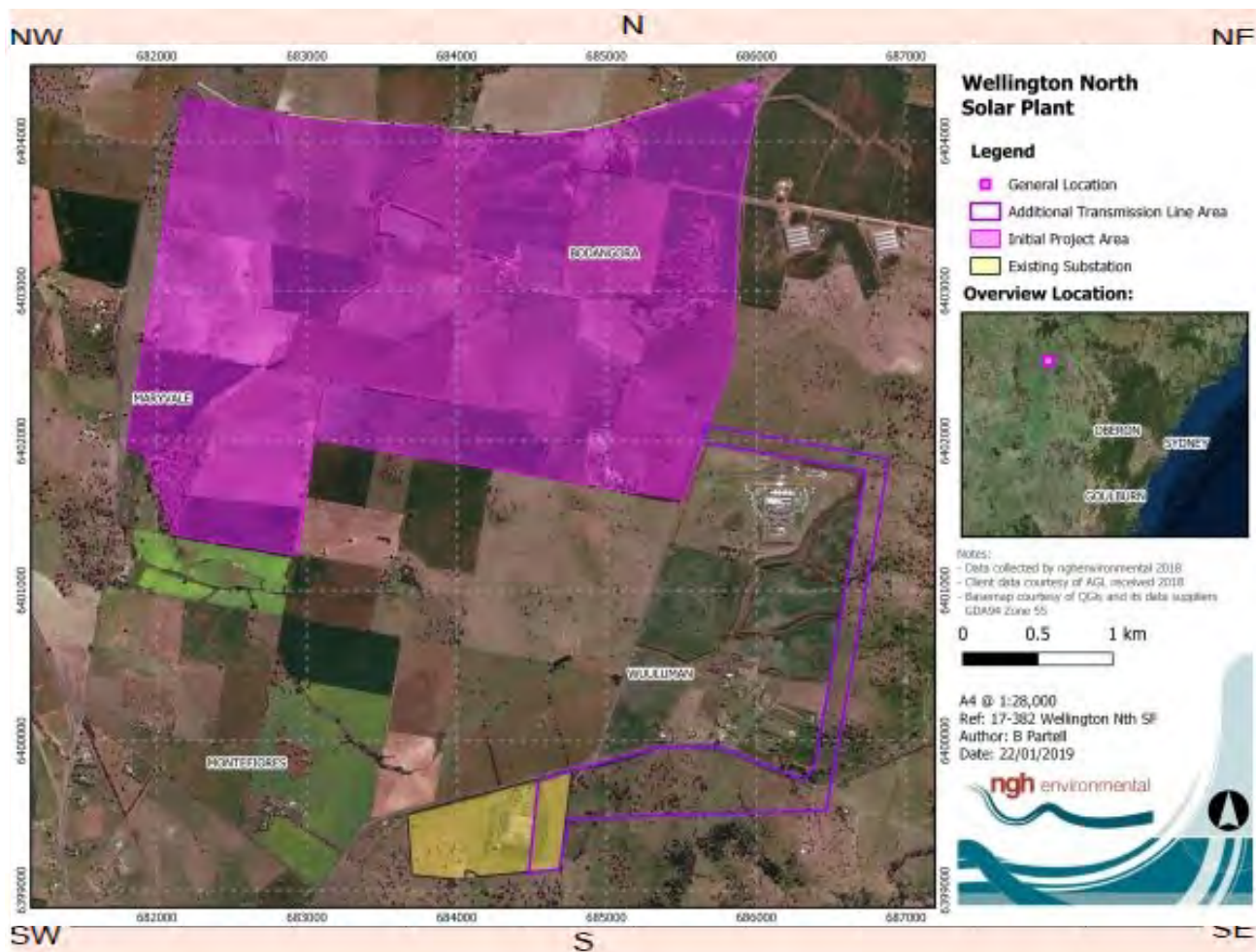
Primary
Report:

How to get
to the site:

Other site
information:

The artefact was located close to the fence line in an area of low grass cover and red-brown silty soil with approximately 40-50% visibility.

Site location map



Site contents information

open/closed site:

Site condition:

Features:

	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)
1. <input type="text" value="Artefact"/>	<input type="text" value="1"/>	<input type="text" value="0.15"/>	<input type="text" value="0.1"/>

Description:

The site consists of a single chert core measuring 106mm length, 94mm in width and 81mm in thickness.

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Features:

	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)
2. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Description:

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Features:

3.

Description:

Scarred Trees			
Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Features:

4.

Description:

Scarred Trees			
Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Features:

5.

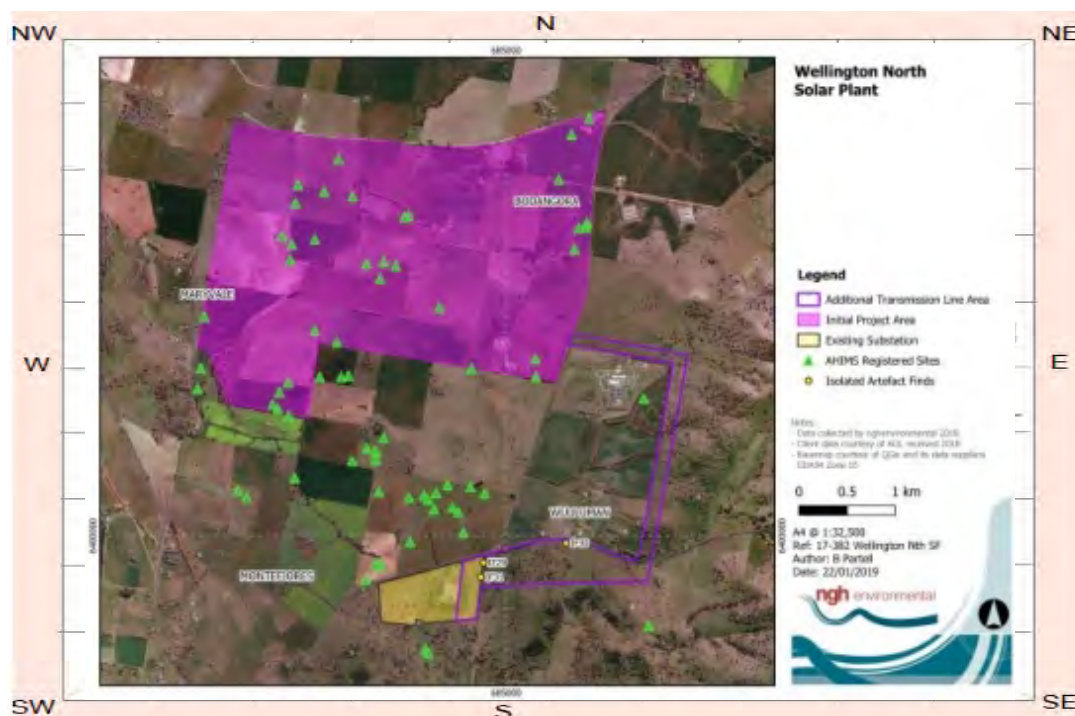
Description:

Scarred Trees			
Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Other Site Info:

The artefact was located close to the fence line in an area of low grass cover and red-brown silty soil with approximately 40-50% visibility.

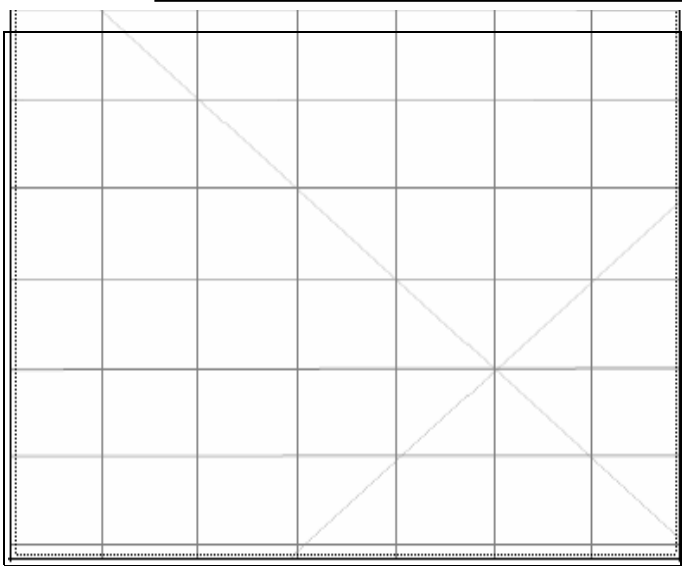
Site plan



Site photographs



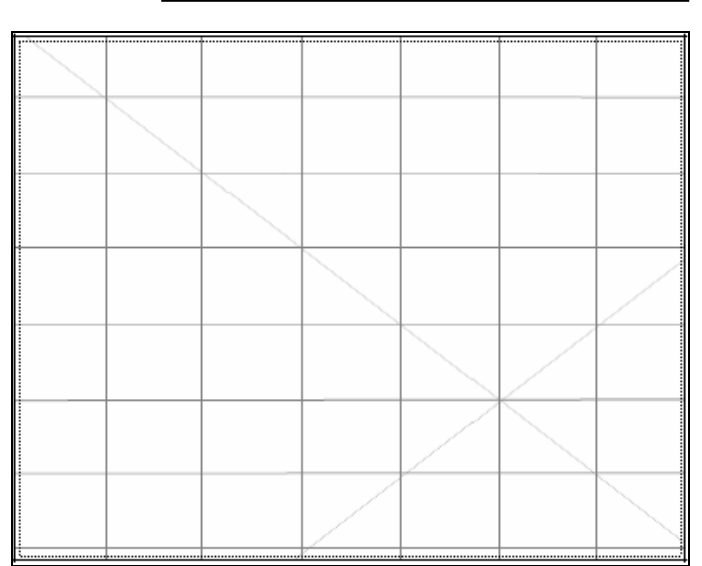
Description:



Description:



Description:



Description:

Site restrictions

Do you want to Restrict this site?:

Restriction type: Gender General Location

Why is this site restricted?:

Further information contact

Title Surname First name

Organisation:

Address:

Phone: E-mail:

Australia

SYDNEY

Ground floor 20 Chandos Street
St Leonards NSW 2065
T 02 9493 9500

NEWCASTLE

Level 3 175 Scott Street
Newcastle NSW 2300
T 02 4907 4800

BRISBANE

Level 1 87 Wickham Terrace
Spring Hill QLD 4000
T 07 3648 1200

CANBERRA

Suite 2.04 Level 2
15 London Circuit
Canberra City ACT 2601

ADELAIDE

Level 4 74 Pirie Street
Adelaide SA 5000
T 08 8232 2253

MELBOURNE

Suite 8.03 Level 8
454 Collins Street
Melbourne VIC 3000
T 03 9993 1900

PERTH

Suite 9.02 Level 9
109 St Georges Terrace
Perth WA 6000
T 08 6430 4800

Canada

TORONTO

2345 Young Street Suite 300
Toronto ON M4P 2E5
T 647 467 1605

VANCOUVER

60 W 6th Ave Suite 200
Vancouver BC V5Y 1K1
T 604 999 8297



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