

# Bango Wind Farm

Southern Tablelands, New South Wales

## Heritage Management Plan

June 2019



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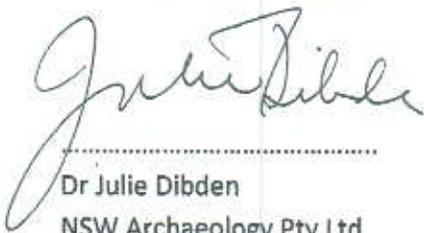
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## Abbreviations

Abbreviation	Meaning
<b>AHIMS</b>	Aboriginal Heritage Information Management System
<b>CCC</b>	Community Consultative Committee
<b>CoA</b>	Condition of Approval
<b>BWF</b>	Bango Wind Farm
<b>DECCW</b>	Department of Environment, Climate Change and Water, now OEH
<b>Department, the</b>	Commonwealth Department of the Environment and Energy
<b>Development Corridor</b>	The approved Development Corridor as defined in the Development Consent, comprising of a 100m buffer around all approved infrastructure.
<b>Development Footprint</b>	The area of physical disturbance associated with the construction of the Project, comprised of temporary impacts and permanent impacts.
<b>DOEE</b>	Commonwealth Department of the Environment and Energy
<b>DPE</b>	NSW Department of Planning and the Environment
<b>EA</b>	Environmental Assessment
<b>EMS</b>	Environmental Management Strategy
<b>EP&amp;A Act</b>	NSW <i>Environmental Planning and Assessment Act 1979</i>
<b>EPC</b>	Engineering, Procurement and Construction contractor; also refers to any other principal contracting entity engaged on the Project, such as TransGrid
<b>Heritage Item</b>	An item as defined under the Heritage Act and/or an Aboriginal object or Aboriginal Place as defined under the NPW Act.
<b>HMP</b>	Heritage Management Plan
<b>NPW Act 1974</b>	National Parks and Wildlife Act 1974
<b>OEH</b>	Office of Environment and Heritage
<b>Project Site</b>	The land within the cadastral boundaries associated with the proposed Project, as defined in the Development Consent.
<b>RAPs</b>	Registered Aboriginal Parties - Aboriginal stakeholders registered for cultural heritage consultation for the development
<b>RMP</b>	Risk Management Plan
<b>Secretary, the</b>	Secretary for the NSW Department of Planning and the Environment

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# 1 Introduction

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This Heritage Management Plan (HMP) has been prepared by Julie Dibden, NSW Archaeology Pty Ltd, for CWP Renewables on behalf of Bango Wind Farm Pty Ltd (The Proponent). The document forms a component of the Bango Wind Farm (BWF; the Project) Environmental Management Strategy (EMS).

The Project will consist of up to 46 wind turbine generators (turbines), access roads, hardstands, laydown areas, internal electrical reticulation, temporary construction compounds, rock crushing facilities, concrete batching plant(s), a substation, an operations and maintenance facility, up to 6 km of overhead transmission line and a switching station. The turbines to be constructed and operated for the Project will be selected from the 49 approved wind turbine locations. A map showing all approved Project infrastructure is shown in Figure 1.

The Aboriginal and historic heritage in the Development Corridor was recorded during the EA in 2012, as documented in the report entitled:

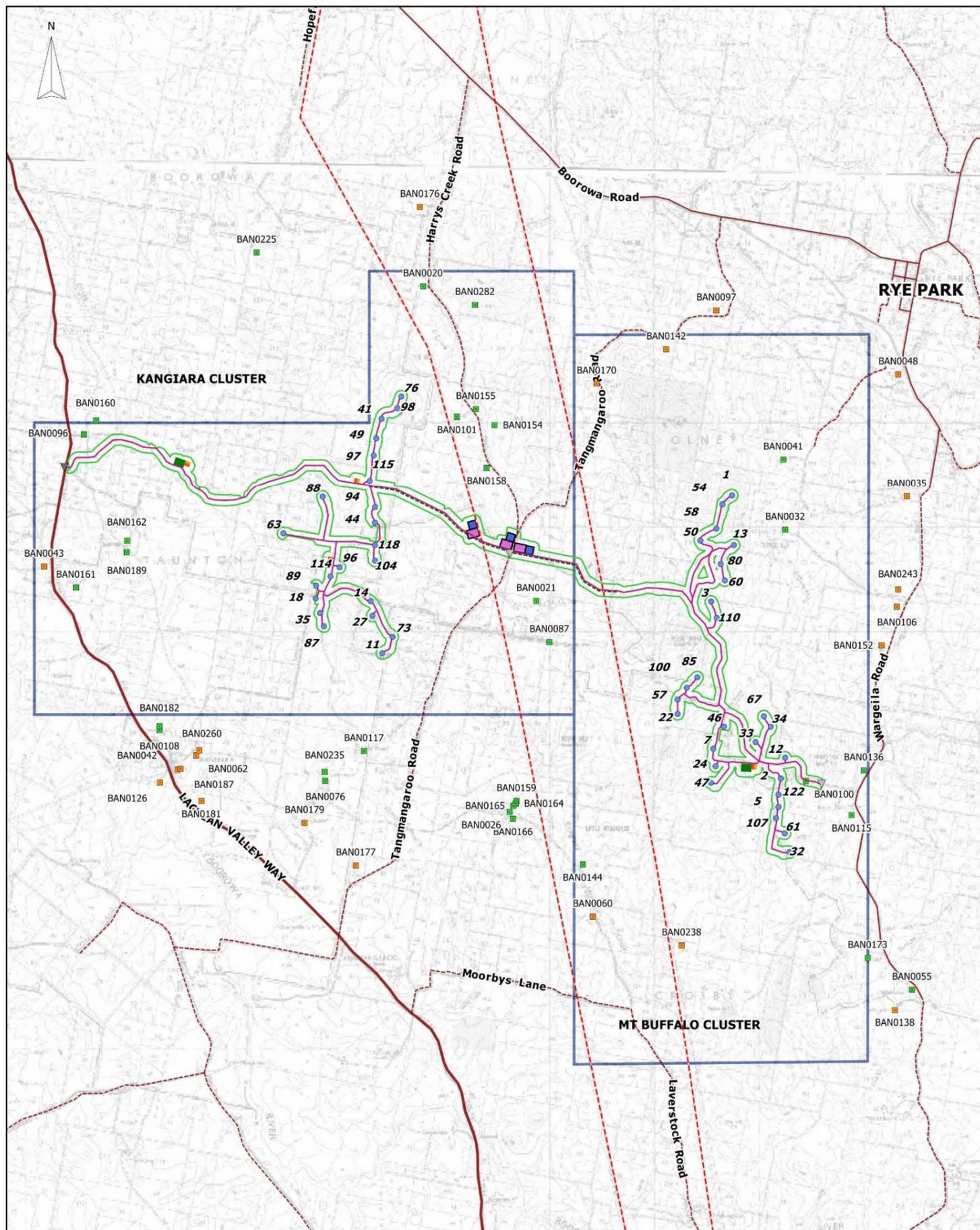
Julie Dibden (2013) Proposed Bango Wind Farm Aboriginal Cultural Heritage  
Assessment Report. *A report to Wind Prospect CWP Pty Ltd*

An additional field survey was conducted in 25 March - 26 March 2019, the results of which is documented in addendum correspondence to the EA dated 3 April 2019. The additional survey was conducted in areas of the development corridor that had not previously been surveyed.

The location of all Aboriginal object locales and heritage items recorded during the EA are shown in Figures 2 to 3. Detailed maps clearly showing the area encompassed by each heritage item are shown in Appendix 2.

This HMP has been prepared based on the potential impacts of all Approved Project Infrastructure (Figure 1), including the 49 turbines. Prior to construction an Engineering Procurement and Construction (EPC) contractor will be appointed to prepare a detailed design for the final layout and deliver the construction phase of the Project. In this plan the term EPC is used to represent any contractor engaged by the Project Owner to deliver works under supervision of the Principal for the Project. This plan describes the measures that will be implemented to manage and mitigate unavoidable impacts associated with the construction of the Project, once the final design layout is determined.

A description of how the Project will comply with the broader requirements of the Development Consent and EPBC Approval is provided in the EMS.



<b>LEGEND</b> <b>PROPOSED INFRASTRUCTURE</b> <b>Layout Option 1 (49 WTG)</b> ● WTG ▼ Main Site Access ▽ Access (no oversize) — Access Track - - - Overhead Transmission Line ■ Construction Compound Option ■ Concrete Batching Plant Option ■ Rock Crushing Facility Option ■ Collector Substation Option ■ Switching Station Option ○ Development corridor □ Cluster		<b>EXISTING INFRASTRUCTURE</b> - - - Unsealed Road — Sealed Road - - - 132 kV Transmission Line ■ Associated Residence ■ Non-Associated Residence		<b>COMPANY</b> BANGO WIND FARM PTY LTD	
				<b>TITLE</b> LAYOUT - APPENDIX 2	
DATE	DRAWN BY	CHECKED BY	SIZE	SHEET	
27 NOV 2018	K OLD	E MOUNSEY	A3	1 OF 1	
SCALE BAR			SCALE		
0 ————— 4 km			1:74000		

Image, roads and houses: derived from GEODATA Topo250K; Transmission lines: 132 kV - TransGrid; All other data: CWPR.

Figure 1 Approved Project Infrastructure (Appendix 2 from the NSW Consent)

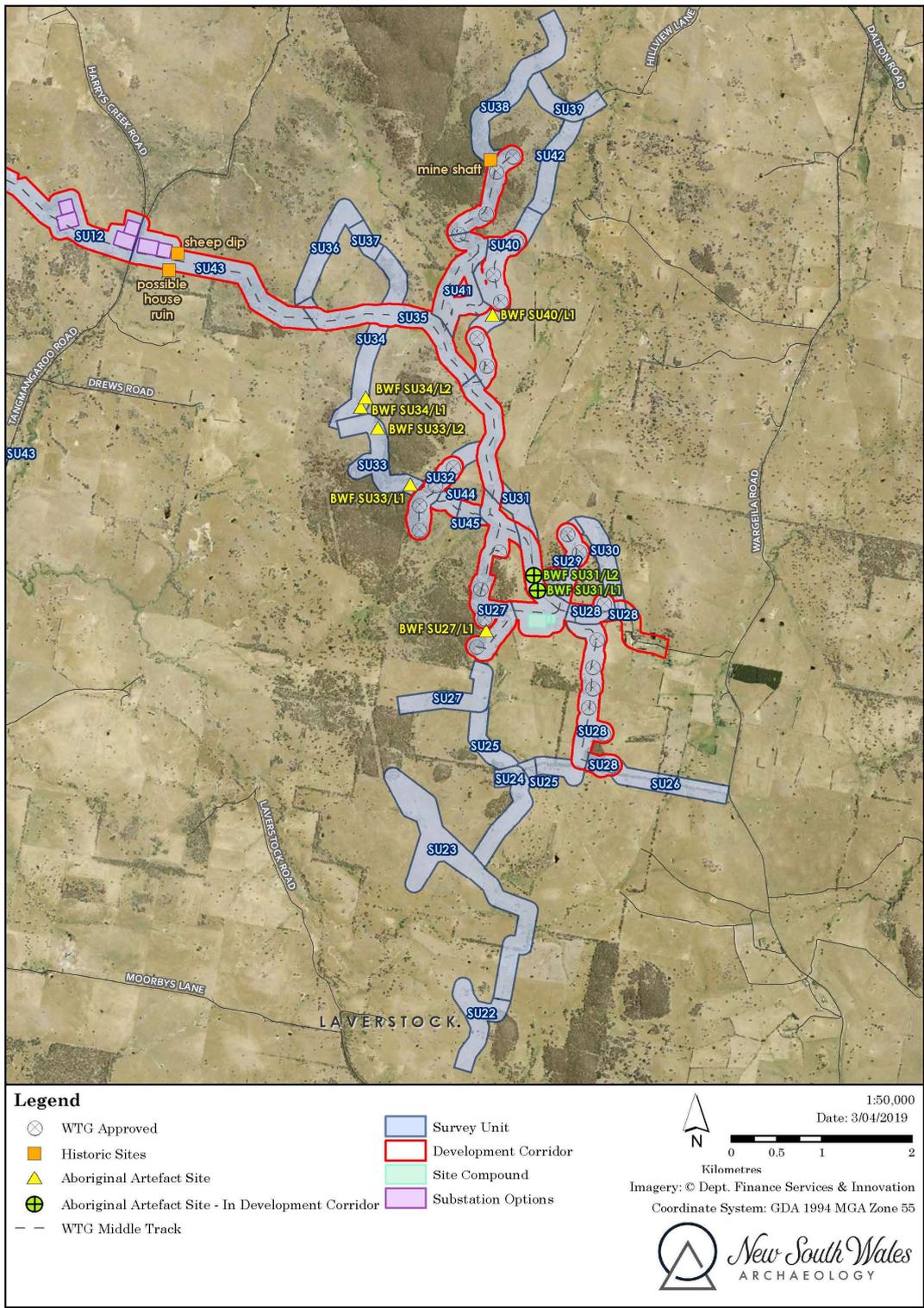


Figure 2 Aboriginal Heritage Loci and historic sites - east end of Project Area.

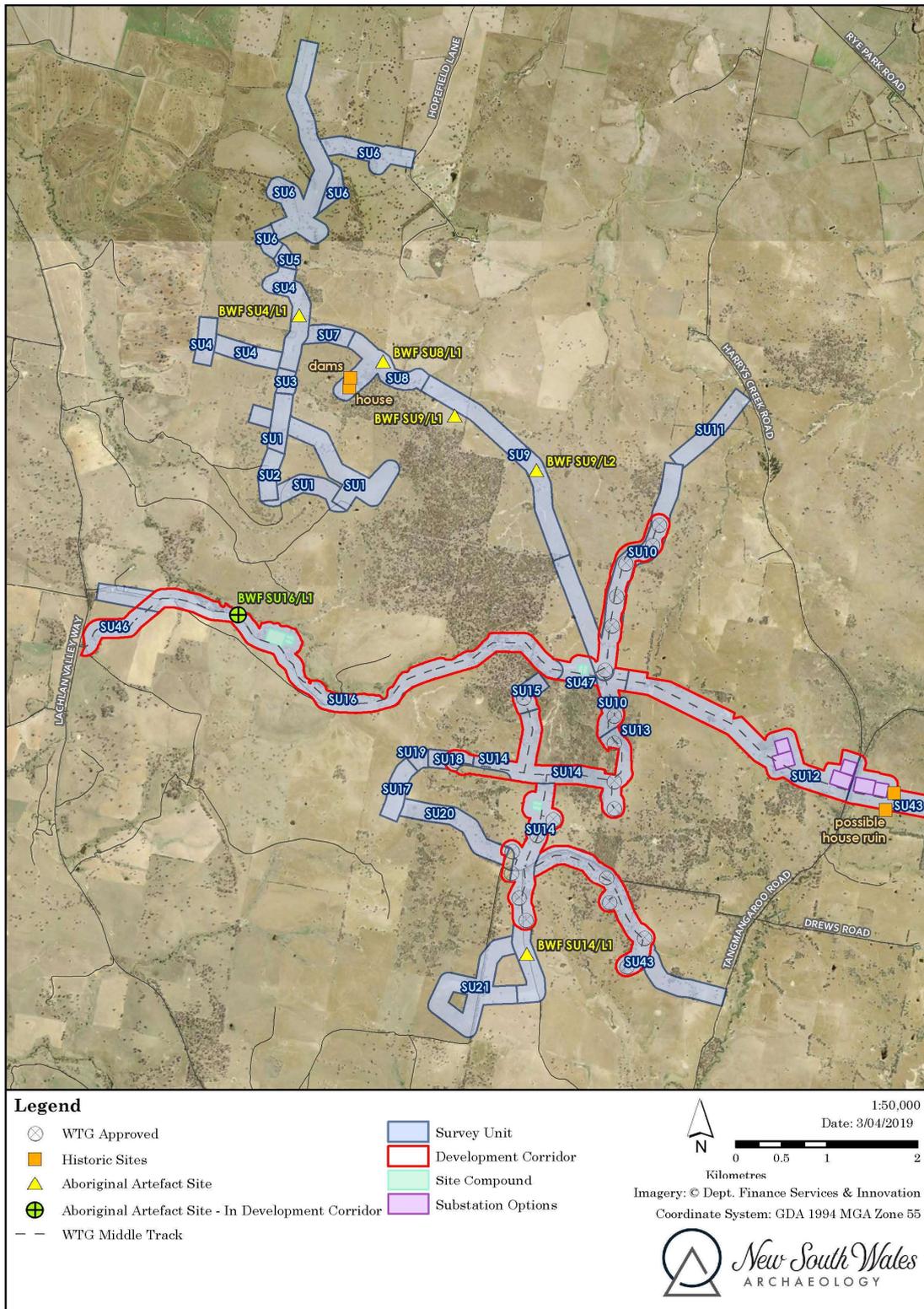


Figure 3 Aboriginal Heritage Loci and historic sites - west end of Project Area.

## 1.1 Purpose and Scope

The HMP has been developed to meet the requirements of the Project's Development Consent (SSD-6686), specifically conditions 22 - 23 (Schedule 3 Environmental Conditions - General). The scope of this HMP is to detail how construction impacts will be avoided, minimised and managed, including the roles and responsibilities for implementation. This plan has been developed as a component of, and should be read in conjunction with, the Project's EMS.

## 1.2 Legislative Requirements

Table 1 Relevant Legislation and Policies

Legislation	Relevance
<i>Environmental Protection and Biodiversity Conservation (EPBC) Act 1999</i>	<i>Determined to be a Controlled Action on 7 May 2013 by the Commonwealth Department of Environment. Approval issued 9/8/18 EPBC 2013/6810.</i>
<i>Environment Planning and Assessment (EP&amp;A) Act 1979</i>	<i>Development consent SSD 6686 issued 2018 by the Land and Environment Court.</i>
<i>National Parks and Wildlife Act as amended (1974)</i>	<i>Provides protection for Aboriginal Objects and Aboriginal Places.</i>
<i>National Parks and Wildlife Amendment Regulation 2009</i>	<i>Provides protection for Aboriginal Objects and Aboriginal Places.</i>
<i>Heritage Act 1977 (Heritage Act)</i>	<i>Provides protection for heritage items.</i>
<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth)</i>	<i>Aims to preserve and protect from injury or desecration areas and objects in Australia and in Australian waters, being areas and objects that are of particular significance to Aboriginals in accordance with Aboriginal tradition.</i>

## 1.3 Conditions of Approval

The Project's Development Consent (SSD-6686) sets out conditions 22 - 23 (Schedule 3 Environmental Conditions - General) in respect of Aboriginal heritage (Table 2).

Table 2 Conditions of Approval relevant to this Management Plan

CoA	Requirement	Section this is Addressed
22	<p><b>Protection of Aboriginal heritage items</b></p> <p>The Applicant must:</p> <p>(a) ensure the development does not cause any direct or indirect impacts on the Aboriginal heritage items identified in Table 1 in Appendix 6, or located outside the approved disturbance area; and</p> <p>(b) minimise any impacts on the Aboriginal heritage items identified in Table 2 in Appendix 6.</p> <p>Note: The locations of the Aboriginal heritage items referred to in this condition are shown in the figure in APPENDIX 6.</p>	<p>See Site locations and Approved disturbance area in Figures 2 and 3 and Table 4</p>

CoA	Requirement	Section this is Addressed
23	<p><b>Aboriginal Heritage Management Plan</b></p> <p>Prior to the commencement of construction, the Applicant must prepare a Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <ol style="list-style-type: none"> <li>be prepared by a suitably qualified and experienced person whose appointment has been endorsed by the Secretary;</li> <li>be prepared in consultation with OEH and Aboriginal stakeholders); and</li> <li>include up to date baseline mapping of the heritage items within and adjoining the development disturbance area.</li> <li>Include a description of the measures that would be implemented for: <ul style="list-style-type: none"> <li>protecting Aboriginal heritage items identified in Table 1 in Appendix 6 and any items located outside the project disturbance area;</li> <li>minimising and managing the impacts of the development on heritage items identified in Table 2 in Appendix 6;</li> <li>a contingency plan and reporting procedure if: <ul style="list-style-type: none"> <li>Aboriginal heritage items outside the approved disturbance area are damaged;</li> <li>previously unidentified Aboriginal heritage items are found; or</li> <li>Aboriginal skeletal material is discovered;</li> </ul> </li> <li>ensuring workers on site receive suitable heritage inductions prior to carrying out any development on site, and that records are kept of these inductions; and</li> <li>ongoing consultation with Aboriginal stakeholders during the implementation of the plan;</li> </ul> </li> <li>a program to monitor and report on the effectiveness of these measures and any heritage impacts of the project.</li> </ol> <p>Following the Secretary's approval, the Applicant must implement the Heritage Management Plan.</p>	<p>Endorsement provided 6/2/19 Section 1.4 See Figures 2 and 3</p> <p>Section 4.2</p> <p>Section 4.3</p> <p>Section 4.4</p> <p>Section 4.5</p> <p>Section 4.6</p> <p>Section 4</p> <p>Section 5</p>

#### 1.4 Consultation

A formal process of Aboriginal consultation had been conducted for this project, as documented in Dibden (2013). The Registered Aboriginal Parties (RAPs) in the process of consultation for the project are listed in the table below. Contact details for Raps are provided in Appendix 1.

Table 3 Registered Aboriginal Parties

Arnold Williams - Ngunawal Elders Corporation
Buru Ngunawal Aboriginal Corporation
Peter Falk Consultancy
Ngunawal Heritage Aboriginal Corporation
Onerwal Local Aboriginal Land Council

Consultation with the Registered Aboriginal Parties would be ongoing during the life of the development. This would include, but not be limited to:

- Consultation in regard to processes and strategies as outlined in this HMP; and
- Consultation in the event of any unexpected Aboriginal objects or burials being found during the construction and operation of the wind farm.

A draft version (draft 3) of the HMP has been provided to Registered Aboriginal Parties on the 8/4/19. No responses have been received.

Consultation with OEH was undertaken and comments on the HMP provided 17/5/19. Comments have been addressed and amendments included in the HMP.

## 2 Environmental Conditions

### 2.1 Existing Conditions

The Aboriginal heritage in the Development Corridor was recorded during the EA in 2012, as documented in the report entitled:

Julie Dibden 2013 Proposed Bango Wind Farm European and Aboriginal Cultural Heritage Assessment Report. *A report to Wind Prospect CWP Pty Ltd.*

An additional field survey was conducted in 25 March - 26 March 2019, the results of which is documented in addendum correspondence to the EA dated 3 April 2019. The additional survey was conducted in areas of the development corridor that had not previously been surveyed and no Additional Aboriginal object locales were recorded.

The Aboriginal object locales recorded during the EA are listed in the table below. The location of all Aboriginal object locales is shown in Figure 2 to 3. Detailed maps clearly showing the area encompassed by each Aboriginal object locale are shown in Appendix 2.

*Table 4 A Summary of the Aboriginal object locales identified by Dibden (2013) and the management measures as per Appendix 6 of the Development Approval. Coordinate system: GDA.*

Name	Comments	Easting	Northing	Impacts: avoid or minimise ( <i>Appendix 6 of the DA</i> )
Bango WF SU4/L1	1 artefact on a casual vehicle track in SU4	661332	6178976	Avoid impacts
Bango WF SU8/L1	5 artefacts in animal and vehicle track exposures in SU8	662260	6178462	Avoid impacts
Bango WF SU9/L1	1 isolated artefact in a cultivated paddock in SU9	663049	6177863	Avoid impacts
Bango WF SU9/L2	5 artefacts located in an extensive area of erosion in SU9	663949	6177258	Avoid impacts
Bango WF SU14/L1	7 artefacts located on a casual vehicle track in SU14	663847	6171872	Avoid impacts
Bango WF SU16/L1	5 artefacts located on a casual vehicle track in SU16	660657	6175646	Minimise impacts
Bango WF SU27/L1	3 artefacts located along a sheep track in SU27	671324	6169442	Minimise impacts
Bango WF SU31/L1	17 artefacts located along a graded vehicle track in SU31	671897	6169892	Minimise impacts

Name	Comments	Easting	Northing	Impacts: avoid or minimise ( <i>Appendix 6 of the DA</i> )
Bango WF SU31/L2	3 artefacts located along a graded vehicle track in SU31	671855	6170070	Minimise impacts
Bango WF SU33/L1	3 artefacts on a graded track and drain area in SU33	670481	6171086	Avoid impacts
Bango WF SU33/L2	2 artefacts located on an animal track in SU33	670124	6171713	Avoid impacts
Bango WF SU34/L1	2 artefacts located on a sheep track in SU34	669932	6171948	Avoid impacts
Bango WF SU34/L2	1 artefact located on a sheep track in SU34	669988	6172052	Avoid impacts
Bango WF SU40/L1	2 artefacts located on a casual vehicle track in SU40	671397	6172975	Minimise impacts

The potential historic items recorded during the EA are listed in the table below and are shown of Figures 2-3. Two additional potential historic items were recorded during the additional survey conducted in 25 March - 26 March 2019.

*Table 5 Summary of potential historic items*

ID	Easting	Northing	Location	Recommendations
Farmhouse complex	661885	6178175	Outside current development corridor	N/A
Prospecting pits	671374	6174706	Outside current development corridor	Ensure no inadvertent impact by maintaining a 20m exclusions zone
Prospecting pits	671815	6174070	Outside current development corridor	N/A
Sheep dip	667900	6173669	In development corridor	Ensure no inadvertent impact by maintaining a 20m exclusions zone
Possible house site	667900	6173669	Outside current development corridor	Ensure no inadvertent impact by maintaining a 20m exclusions zone

## 2.2 Potential Impacts

Anticipated impacts to Aboriginal heritage, based on the Development Corridor as shown in Figures 2 and 3 are set out in the table below. The majority of sites located during the EA are now located outside the Development Corridor and will not be impacted during construction of the development; this is because of changes to the layout since the time of the original field survey

and assessment. All the sites required to be avoided as per Table 1, Appendix 6 of the Development Consent are now located outside the Development Corridor. The majority of the sites for which impacts are allowable (providing impacts are minimised) as set out in Table 2 of Appendix 6 of the Development Consent) are also now located outside the Development Corridor.

The location of all Aboriginal object locales recorded at the Project Site is shown in Figures 2 to 3. Detailed maps clearly showing the area encompassed by each Aboriginal object locale are shown in Appendix 1 of the Dibden (2012) report.

*Table 6 A summary of the Aboriginal object locales, and the management measures as per Appendix 6 of the Development Approval and whether or not impacts are likely.*

Aboriginal object locale	Impacts: avoid or minimise (Appendix 6 of the DA)	Whether in or out of the Development Corridor	Impacts
Bango WF SU4/L1	Avoid impacts	This site is outside the Development Corridor	Nil; artefact locale well away from proposed activity
Bango WF SU8/L1	Avoid impacts	This site is outside the Development Corridor	Nil; artefact locale well away from proposed activity
Bango WF SU9/L1	Avoid impacts	This site is outside the Development Corridor	Nil; artefact locale well away from proposed activity
Bango WF SU9/L2	Avoid impacts	This site is outside the Development Corridor	Nil; artefact locale well away from proposed activity
Bango WF SU14/L1	Avoid impacts	This site is outside the Development Corridor	Nil; artefact locale well away from the proposed activity
Bango WF SU16/L1	Minimise impacts	This site is in the Development Corridor	Likely impact from road access and other infrastructure.
Bango WF SU27/L1	Minimise impacts	This site is outside the Development Corridor	Nil; artefact locale adjacent to Development Corridor
Bango WF SU31/L1	Minimise impacts	This site is in the Development Corridor	Likely impact from road access and other infrastructure.

Aboriginal object locale	Impacts: avoid or minimise <i>(Appendix 6 of the DA)</i>	Whether in or out of the Development Corridor	Impacts
Bango WF SU31/L2	Minimise impacts	This site is in the Development Corridor	Likely impact from road access and other infrastructure.
Bango WF SU33/L1	Avoid impacts	This site is outside the Development Corridor	Nil; artefact locale adjacent to Development Corridor
Bango WF SU33/L2	Avoid impacts	This site is outside the Development Corridor	Nil; artefact locale adjacent to Development Corridor
Bango WF SU34/L1	Avoid impacts	This site is outside the Development Corridor	Nil; artefact locale adjacent to Development Corridor
Bango WF SU34/L2	Avoid impacts	This site is outside the Development Corridor	Nil; artefact locale adjacent to Development Corridor
Bango WF SU40/L1	Minimise impacts	This site is outside the Development Corridor	Nil; artefact locale adjacent to Development Corridor

### 3 Roles and Responsibilities

Table 7 Roles and responsibilities.

Role	Responsibility
<b>Principal Project Manager / Asset Manager</b>	<ul style="list-style-type: none"> <li>• Responsible for implementation of CWP Renewables Environmental Policy;</li> <li>• Responsible for delivery of the Project in accordance with this HMP and associated plans and statements;</li> <li>• Review and approve Project design changes, and update Project Environment Officer;</li> <li>• Provide adequate resources to allow the implementation of the project HMP;</li> <li>• Issue non-conformance notices and to issue actions to avoid or minimise potential environmental impacts, and failing the effectiveness of such steps, order cessation of a specific activity.</li> <li>• Ensure all project personnel attend a site induction prior to commencing work;</li> <li>• Hold regular project team meetings; and</li> <li>• Support and attend Community Consultative Committee (CCC).</li> </ul>
<b>Project Environment Officer</b>	<ul style="list-style-type: none"> <li>• Ensure site specific environmental/heritage requirements are fulfilled and be the primary point of contact for community liaison;</li> <li>• Ensure sub-contractors and their agents comply with the HMP;</li> <li>• Undertake internal environmental auditing and reporting;</li> <li>• Be the primary point of contact for regulatory agency liaison;</li> <li>• Oversee environmental/heritage monitoring;</li> <li>• Respond to environmental incidents; and</li> <li>• Report to the Principal Project Manager on environmental performance of the EPC and sub-contractors.</li> </ul>
<b>Independent Environmental Auditor</b>	<ul style="list-style-type: none"> <li>• Review the adequacy of the measures undertaken to deliver the Project in accordance with the EMS, management plans, programs, Development Consent and Commonwealth approval;</li> <li>• Request reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, direct that relevant actions be ceased immediately; and</li> <li>• Provide an audit report to be forwarded to the Secretary or Minister as relevant:               <ul style="list-style-type: none"> <li>○ assesses whether the development complies with the relevant requirements in this consent, and any strategy, plan or program required under the consent; and</li> </ul> </li> </ul>

Role	Responsibility
	<ul style="list-style-type: none"> <li>○ <i>recommend appropriate measures or actions to improve the environmental performance of the development and any strategy, plan or program required under the consent.</i></li> </ul>
<b>EPC Project Manager</b>	<ul style="list-style-type: none"> <li>● <i>Overall responsibility for the performance of the EPC and its sub-contractors against the requirements of this plan and the conditions of the Development Consent and Commonwealth approval;</i></li> <li>● <i>Develop the Risk Management Plan for construction, and maintain that plan throughout construction;</i></li> <li>● <i>Consult with Principal Project Manager in relation to all Project design plan changes;</i></li> <li>● <i>Provide the Project Environment Officer with detailed designs including mapping demarcating clearing boundaries;</i></li> <li>● <i>Ensure all staff and sub-contractors complete a site environmental and heritage induction prior to commencing work on site as refresher training;</i></li> <li>● <i>Ensure adequate resources are available for all contractors and subcontractors to deliver the Project in compliance with the HMP and other relevant documents;</i></li> <li>● <i>Hold regular project team meetings and toolbox talks, ensuring information is shared between all site personnel; and</i></li> <li>● <i>Support and attend Community Consultative Committee (CCC) meetings at the request of the Principal Project Manager.</i></li> </ul>
<b>EPC Environmental Officer</b>	<ul style="list-style-type: none"> <li>● <i>Avoidance of Aboriginal object locales through the detailed design process;</i></li> <li>● <i>Identification and demarcation of the Aboriginal object locales which may be impacted by the final detailed design;</i></li> <li>● <i>Responsible for implementing the mitigation measures identified by this plan and engaging the project archaeologist;</i></li> <li>● <i>Monitoring of management measures, including maintenance of monitoring records and support of auditing;</i></li> <li>● <i>Providing documentation required to comply with any heritage reporting requirements; and</i></li> <li>● <i>Address any heritage incident, unexpected find or non-conformance, including notification of the Project Environment Officer immediately upon identifying the issue.</i></li> </ul>
<b>Project archaeologist</b>	<p><i>The project archaeologist will be engaged as required to deliver certain responsibilities of this plan:</i></p> <ul style="list-style-type: none"> <li>● <i>Report directly to the EPC Environment Officer for all heritage matters and requirements of this plan.</i></li> <li>● <i>Review the detailed designs to advise on avoidance and mitigation measures, including salvage and reburial requirements of this plan.</i></li> <li>● <i>Submit any related Aboriginal Site forms to NSW OEH within 30 days of the reburial taking place.</i></li> <li>● <i>Assess any unexpected finds in accordance with Section 4.4.</i></li> </ul>

Role	Responsibility
	<ul style="list-style-type: none"> <li>• <i>Review and support the development of the Aboriginal Heritage Induction (Section 4.6).</i></li> <li>• <i>Lead the engagement with Registered Aboriginal Parties, and support dispute resolution in accordance with Section 4.7.</i></li> </ul>
<b>RAPS</b>	<ul style="list-style-type: none"> <li>• <i>RAPs to review and advise in relation to the development of the HMP;</i></li> <li>• <i>RAPS to advise in regard to cultural significance and the development of management options, as required.</i></li> </ul>

## **4 Management Measures**

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The Project EMS requires environmental management plans and programs to be prepared relevant to the stage of the development to enable effective risk management, compliance with relevant statutory requirements, consistency with the relevant project documents and to meet environmental objectives and targets. This section of the plan provides the management measures that will be used to avoid and mitigate potential impacts of the Project on Aboriginal heritage.

The Project Environment Officer is responsible for maintaining this plan and making the plans available to staff and contractors. The EPC Environment Officer is responsible for implementing the plan during construction, including ensuring induction materials contain information to train and educate all contractors on site to understand the requirements and mitigation measures of this plan.

### **4.1 Objectives and Targets**

This HMP aims to outline the appropriate responsibilities and actions that will be undertaken for the purposes of managing impacts to Aboriginal and historic heritage and to comply with the conditions of Development Consent.

The HMP describes:

- a) The procedures for the management of identified objects within the development site.
- b) The procedures to be followed if any unidentified objects and/or human remains are identified during the development works.
- c) The impact mitigation procedures to be followed.
- d) The process for how the HMP procedures will be managed and adhered to during the construction and operation of the project.
- e) The process that will be followed for continuing consultation with the Aboriginal stakeholders, OEH and DPE, where required.

For the purposes of this HMP, the activity is inclusive of all impacts relating to the wind farm, including but not limited to, the construction of roads, hardstands, laydown areas, substations, works compounds, batching plants, service facilities, temporary construction facilities and so on, the erection of wind turbines and the installation of electrical cabling, both overhead and underground.

Aboriginal objects in the form of stone artefacts were recorded in a number of locales across the development area. The majority of areas in which these have been recorded are predicted to contain additional stone artefacts which, because of ground cover (grasses etc), were undetectable during field survey. The construction of the wind farm project may therefore result in impacts to known stone artefact locales and undetected artefact distributions as described in respect of each Survey Unit (Dibden 2013).

Due to the high cultural significance of the Aboriginal heritage in the development area, a strategy of impact mitigation is required. Where feasible the Project will avoid and minimise impacts to ground surfaces containing heritage items, to ensure as little impact as possible to Aboriginal objects in the development corridor.

Four strategies which align with the requirements of the Development Consent Conditions of Approval (CoA) are developed:

- 1) To avoid impact to known items as identified in Table 1, Appendix 6 of the Development Consent;
- 2) To avoid impact to items (known or unknown) outside the Development Envelope;
- 3) To minimise impact to known sites as identified in Table 2, Appendix 6 of the Development Consent; and
- 4) General measures to minimise the potential to impact unknown sites within the approved disturbance area.

These strategies are developed in respect of pre-construction activities, construction, operation and decommissioning.

One historic site, a sheep dip, is located within the Development Corridor. Two historic sites are located near to but outside the Development Corridor: Prospecting pits and a possible house site.

## **4.2 Avoidance Measures**

### *Artefact Locales*

In accordance with the Development Consent CoA, nine Aboriginal heritage items (SU4/L1, SU8/L1, SU9/L1, SU9/L2, SU14/L1, SU33/L1, SU33/L2, SU34/L1/ SU34/L2) are required to be subject to impact avoidance. That is, no impacts are to occur to these sites during the pre-construction activities, construction, operation and decommissioning works. Furthermore, the Development Consent requires that there is no impact to items outside the Development Corridor whether identified or not.

As a result of changes to the layout of the windfarm, most of the known Aboriginal heritage items are no longer in the Development Corridor and they will not be impacted during the pre-construction activities, construction, operation and decommissioning works. Accordingly, to mitigate inadvertent impact:

- the Aboriginal heritage items to be avoided are to be clearly identified on site plans as no-go areas for construction activities.
- all construction activities restricted to the Development Corridor; and
- additional archaeological assessments are to be carried out if any new impacts are to occur outside the Development Corridor / Study area.

#### *Historic heritage*

One historic site, a sheep dip, is located within the Development Corridor. Two historic sites are located near to but outside the Development Corridor: Prospecting pits and a possible house site.

A 20 m buffer would provide adequate protection for these items to ensure avoidance of impacts during construction.

### **4.3 Impact Mitigation Measures**

#### *Artefact Locales*

In accordance with the Development Consent, five Aboriginal heritage items (SU16/L1, SU27/L1, SU31/L1, SU31/L2 and SU40/L1) are required to be subject to the impact mitigation measure of minimisation of impacts. Only three of these, SU31/L1, SU31/L2 and SU16/L1 are within the Development Corridor.

Impacts to Aboriginal heritage locales will be avoided where possible through detailed design and micro-siting. This will include the micro-siting and final site layout of wind turbines, roads, cabling, laydown areas and site compounds. Where Aboriginal heritage locales cannot be avoided, direct impact to the locales will be minimised where possible. Where direct impact can be avoided site management measure will be implemented to protect the Aboriginal heritage locales (refer Table 7).

In order to ensure the minimisation of impacts for the heritage items in the Development Corridor the following should be undertaken:

- Identification of the location, nature and aerial extent of the heritage item on site plans;
- The locations of any sites which will be subject to impact minimisation must be identified by the EPC Environmental Officer and / or project archaeologist;
- Undertaking detailed design and micro-siting to avoid where possible and minimise direct impact to heritage items;
- Clearly define the location of the site in the field and installing temporary fencing and signage where sites are to be retained. An exclusion zone must be defined where heritage locales occur within 20m of works, by installing temporary fencing and signage; and

- Ensuring that workers are inducted and aware of the Heritage Management Plan and its requirements.

It is noted that up to three of the known Aboriginal artefact locales (SU31/L1, SU31/L2 and SU16/L1 located within the Development Corridor) may be impacted during the construction of the wind farm. As such:

- a program of salvage collection is not considered to be warranted for this project;
- impacts to these sites would be minimised; and
- Where Aboriginal artefact locales will be impacted, an Aboriginal Site Impact Recording Form must be completed and submitted to NSW OEH within four (4) months from the commencement of the activity.

We note that four sites located in or very near the Development Corridor were identified to the proponent in the field on 25 March 2019, at which time they were flagged, and no-go zones established in order to minimise impacts. These sites are: SU16/L1, SU31/L1, SU31/L2 and SU27/L1. The micro siting carried out in order to minimise impacts to these sites are documented in Appendix 3. The site locales will be overlain with the Development Corridor and in relation to the disturbance footprint following detailed design to improve protection and avoidance of the items.

*Table 8 Management and mitigation strategies for Aboriginal object locales in the Development Corridor.*

Artefact locale	Impacts: avoid or minimise (Appendix 6 of the DA)	Whether in or out of the development envelope	Impacts	Management and Mitigation (in addition to those discussed above)
Bango WF SU16/L1	Minimise impacts	This site is in the Development Corridor	Will be impacted by proposed road access and associated wind farm infrastructure.	Minimise impacts as much as possible ie keep impacts to road corridor only; Erect temporary fencing and signage to ensure that no inadvertent impacts occur to areas outside identified impact area
Bango WF SU27/L1	Minimise impacts	This site is outside the Development Corridor	Nil; artefact locale adjacent to development envelope and associated wind	Ensure that no inadvertent impacts occur

Artefact locale	Impacts: avoid or minimise (Appendix 6 of the DA)	Whether in or out of the development envelope	Impacts	Management and Mitigation (in addition to those discussed above)
			farm infrastructure.	
Bango WF SU31/L1	Minimise impacts	This site is in the Development Corridor	Will be impacted by proposed road access and associated wind farm infrastructure.	Minimise impacts as much as possible ie keep impacts to road corridor only; Erect temporary fencing and signage to ensure that no inadvertent impacts occur to areas outside identified impact area
Bango WF SU31/L2	Minimise impacts	This site is in the Development Corridor	Will be impacted by proposed road access and associated wind farm infrastructure.	Minimise impacts as much as possible ie keep impacts to road corridor only; Erect temporary fencing and signage to ensure that no inadvertent impacts occur to areas outside identified impact area
Bango WF SU40/L1	Minimise impacts	This site is outside the Development Corridor	Nil impacts as the site is outside the development envelope	n/a

### *Historic heritage*

One historic site, a sheep dip, is located within the Development Corridor. Two historic sites are located near to but outside the Development Corridor: Prospecting pits and a possible house site.

A 20 m buffer would provide adequate protection for these items to ensure avoidance of impacts during construction. In order to ensure the minimisation of impacts for the heritage items in or near the Development Corridor the following should be undertaken:

- Identification of the location, nature and aerial extent of the heritage item on site plans;
- Clearly define the location of the site in the field and installing temporary fencing and signage where sites are to be retained. An exclusion zone must be defined where heritage locales occur within 20m of works, by installing temporary fencing and signage; and

- Ensuring that workers are inducted and aware of the Heritage Management Plan and its requirements in regard to historic heritage.

#### **4.4 Unexpected Finds**

There are no previously unsurveyed areas in the development footprint. To minimise potential impact to Aboriginal objects, not yet identified, within the approved disturbance area the following measures are to be implemented:

- Ground disturbance impacts associated with the Project to be kept to a minimum and to defined areas; and
- If there are design changes that fall outside the Survey Units inspected during the Diben (2013 and 2019) assessment (refer to Figures 2 - 3), assessment by an experienced and qualified archaeologist will be required so that adequate avoidance and mitigation measures can be developed prior to construction.

In the unlikely event that unexpected Aboriginal objects/ values or historic sites are encountered during construction, the following steps should be followed:

- The person who identified the Aboriginal objects/ values or historic sites must immediately notify the person in charge of the activity and refer the matter to the EPC Environmental Officer.
- All construction that could potentially harm the Aboriginal objects/ values or historic sites must cease (including stopping all construction within 20 m).
  - Works may continue outside of the minimum 20 m barrier.
  - Works required to comply with occupational and environmental health and safety standards and/or to protect the cultural heritage, may continue.
- The EPC Environmental Officer shall contact an experienced and qualified archaeologist (i.e. the project archaeologist) so that an assessment can be made.
- Within five (5) working days the archaeologist must be engaged to:
  - record and detail the location and context of the Aboriginal objects/ values or historic sites; and
  - assess the cultural or scientific values of the objects in accordance with the methodology used in the Environmental Assessment.

#### *Aboriginal heritage*

Sites considered to be of low significance (eg isolated artefacts or disperse/small artefact scatters less than three artefacts, eroding earth features, items typically identified of low cultural value) and where avoidance is impossible, no further mitigation is required. The results for the assessment shall be documented by the project archaeologist, recorded by the EPC Environmental Officer and reported internally.

If the project archaeologist determines that Aboriginal objects or values potentially of moderate or high significance, it is preferable to avoid impact if possible. Where avoidance is possible, an exclusion zone must be defined where heritage locales occur within 20m of works, by installing temporary fencing and signage (as per Section 4.3). The results of the assessment shall be documented by the project archaeologist, recorded by the EPC Environmental Officer and reported internally.

Where avoidance is not possible, the discovery must be reported to the OEH, DPE and RAPs as soon as practicable after being assessed by the project archaeologist, to determine whether salvage works are required. The Secretary for Planning must approve any salvage works. The archaeologist must facilitate the involvement of any relevant RAPs if any further works are required as soon as practical to develop a suitable methodology for further works in consultation with the RAPs.

- the location and context of the heritage material must be recorded in detail and an Aboriginal Heritage Information Management System Site Form and an Aboriginal Site Impact Recording Form (if applicable) must be completed and submitted to NSW OEH within four (4) months from the end of management works.

Work may re-commence within the area of exclusion once the actions outlined above have been undertaken, or where there is no other prudent or feasible course of action.

### *Historic heritage*

Unexpected finds may not be significant and therefore would not be classified as relics requiring management. Relics may appear as structure (or ruins) comprised of bricks, sandstone, timber and accumulations of artefacts such as broken ceramic and glass.

A 'relic' under the Heritage Act is defined as any deposit, object or material evidence that:

- relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement; and
- is of State or local heritage significance.

If relics are discovered during project activities the following steps will be taken:

- all work in a 10 m radius of the discovery will cease. If it was deemed necessary, the Project archaeologist would ensure a larger area was defined;
- the project archaeologist will be consulted to assess the find;

- if the archaeologist determines that the find is a relic, the Heritage Division, OEH will be notified under Section 146 of the Heritage Act 1977 (the Heritage Act). In addition, the DPE would be notified;
- archaeological investigation of new finds must occur in accordance with professional standards.

#### **4.5 Impacts to Aboriginal Heritage Items Outside the Approved Disturbance Area**

Should impacts occur to heritage items outside the approved disturbance area occur, the following process should be adhered to:

- Do not further disturb or move the items;
- Immediately cease work in the vicinity and cordon area off;
- Notify the project archaeologist and the NSW OEH Environment Line on 131 555 as soon as practicable and provide available details of the items and their location; and
- Do not re-commence work in the area unless authorised in writing by NSW OEH.

#### **4.6 Discovery of Human Remains**

Should suspected human remains be encountered, the following process should be adhered to:

- Do not further disturb or move the remains;
- Immediately cease work in the vicinity and cordon area off;
- Notify the NSW Police;
- Notify the project archaeologist and the NSW OEH Environment Line on 131 555 as soon as practicable and provide available details of the remains and their location; and
- Do not re-commence work in the area unless authorised in writing by NSW OEH.

#### **4.7 Heritage Training and Induction**

Personnel involved in the construction and operational phases of the Project are to be trained by a qualified archaeologist in procedures to implement recommendations relating to cultural heritage, where necessary, to decrease impact. This training should include:

- Identification of Aboriginal objects and skeletal material;
- Aboriginal cultural awareness;
- Identification of historic heritage; and
- Procedures to be followed during the life of the project.

Refresher training will be undertaken for personnel undertaking construction annually and for personnel involved in wind farm operations biannually.

In order for site workers and contractors to be able to know what processes to follow in regard to this HMP an induction will be provided to all contractors and subcontractors for any development on the site.

The induction materials will include:

- Familiarisation with this HMP;
- Process for the identification Aboriginal objects and skeletal material;
- Aboriginal cultural awareness; and
- The HMP procedures to be followed during the operational life of the project.

Induction records will be maintained to demonstrate compliance with the requirements of this HMP, and records will include:

- Who was trained;
- When training occurred;
- Name and relevant details of trainer; and
- Description of training content.

#### **4.8 Dispute Resolution**

Where a dispute between a RAP / or RAPs and the proponent occurs, the dispute must be jointly investigated.

- Only issues directly related to cultural heritage management will be handled through the following dispute resolution mechanism.
- The RAP must contact the Project Environmental Officer (via email or phone) if they wish to raise a dispute. Contact details for the Project will be available on the Project website prior to the commencement of construction
- The relevant RAP and the proponent must nominate delegates to attempt to negotiate a resolution to the dispute.
- The delegates will attempt resolution within five (5) business days of a notice being issued by either party that a dispute is deemed to exist. Within this time, they may meet / consult with other delegates from either party and the project archaeologist.
- An extension to the five (5) days may be made but must be agreed to by both the proponent and the relevant RAP.
- Advice in regard to resolution of a dispute may need to be sought from DPE and any advice received should be accepted by both parties.

## **5 Monitoring**

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### **5.1 Construction Environmental Monitoring**

Monitoring of heritage mitigation measures will be undertaken to record the effectiveness of impact mitigation measures and inform adaptive management of the environmental management plans and programs.

At a minimum, monitoring required under this plan to be undertaken by the EPC Environment Officer during the construction phase will include:

- Prior to earthworks:
  - Ensure that Aboriginal object locales and historic sites have been clearly identified, fenced if required and demarcated where impact minimisation is required.
- Post earthworks:
  - Ensure that demarcated areas for protection of Aboriginal object locales and historic sites have not been disturbed.
- Daily inspection of any fencing and demarcation zones around Aboriginal object locales and historic sites in active work zones.

### **5.2 Monitoring Records**

Results of monitoring will be recorded by the EPC Environment Officer and the Project Environment Officer as part of inspection checklists that will include as a minimum:

- date of inspection;
- personnel undertaking the inspection;
- features to be inspected/monitored;
- outcomes of the inspection and details of compliance with objectives;
- requirement for any corrective actions; and
- details of any photographic records (file name and saved location) detailing evidence of monitoring.

Results of all monitoring will be maintained at the Project office for supply to relevant agencies upon request.

### **5.3 Auditing**

The construction work will be subject to regular internal audits by the Project Environment Officer to evaluate the EPC performance. Scheduled auditing will also be undertaken by an Independent Environmental Auditor within one year of the commencement of construction and every three years thereafter, in accordance with Schedule 5, Condition 8 of the Development Consent. The

requirements for audits are identified in the EMS. Unscheduled auditing may also be undertaken by NSW DPE and the Commonwealth Department of the Environment and Energy at any stage to evaluate the Project's compliance.

The EPC Environment Officer will support the Project Environment Officer in providing all records and documentation required to demonstrate compliance with this document, the Development Consent and the Commonwealth approval.

## **6 Reporting & Documentation Requirements**

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### **6.1 Internal Reporting**

The EPC Environment Officer will provide monthly reporting to the Project Environment Officer during the construction phase. Monthly reporting will:

- detail any areas which have been fenced;
- status of management measures and heritage impact to known Aboriginal locales and historic sites;
- identify any unexpected archaeological values which have been encountered during construction activities;
- summary of compliance with the Heritage Management Plan and Approval;
- details of any heritage related incidents;
- details of heritage inductions provided;
- inspection and monitoring records; and
- details of the effectiveness of management measures.

All site inspection and monitoring records are to be retained onsite for the duration of construction works and will be produced as required for auditing purposes.

### **6.2 Reporting Incidents**

For the purposes of this HMP, an incident regarding Aboriginal and historic heritage is defined as:

- Impacts to any Aboriginal object locales which as identified in Appendix 6, Table 1 of the Approval are to be avoided;
- Impacts to any historic sites which as identified in this management plan to be avoided;
- The identification of unexpected finds; and
- Identification of any human skeletal remains.

In accordance with Schedule 4, Condition 4 of the Development Consent, the Department must be notified of any incident that has caused, or threatens to cause, material harm to the environment. Noncompliance must also be notified to the Department within 7 days in accordance with Schedule 4, Condition 5.

The EPC Environment Officer is responsible for notifying the Project Environment Officer for of any incident that has caused, or threatens to cause, material harm to the environment as a result of the EPC operations. The EPC Environment Officer must provide the Project Environment Officer

with all records and documentation to support the immediate notification of the Secretary and any other relevant agencies as required under the Development Consent.

### **6.3 Record Keeping**

Records of all heritage activities will be maintained by the EPC Environment Officer and the Project Environment Officer to demonstrate compliance with this plan, the Development Consent and the Commonwealth approval. These records will be made available to the Independent Environmental Auditor, NSW DPE and Commonwealth Department upon request.

## **7 Review**

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The plan may also be required to be reviewed in response to the occurrence of an incident, the submission of an audit report, modification to the conditions of the Development Consent or any new heritage item is identified in accordance with Condition 2 of Schedule 4 of the Development Consent. Review of the plan will be undertaken to the satisfaction of the Secretary. Updates to the plan will be made available on the Project website.

The effectiveness of the HMP will be measured by inspections at least monthly of sites within the Development Corridor by the EPC Environment Officer during construction to monitor compliance against the Plan. Specifically, consideration will be given to avoidance and minimisation of impact, disturbance footprint, restricting works to within the Development Corridor and as appropriate reporting, notification and incident management.

## References

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- Dibden, J. 2012 *Bango Wind Farm European and Aboriginal Cultural Heritage Assessment Report. A report to CWP Renewables Pty Ltd.*
- Dibden, J 2019 *Additional Archaeological Assessment.*

## Appendix A

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### Contact details for the Registered Aboriginal Parties

Arnold Williams - Ngunawal Elders Corporation	Mob: 0431271500 Email: <a href="mailto:blakneycreek@gmail.com">blakneycreek@gmail.com</a>
Buru Ngunawal Aboriginal Corporation	Mobile: 0419 425 347; Email: <a href="mailto:walbell@bigpond.net.au">walbell@bigpond.net.au</a>
Peter Falk Consultancy	<a href="mailto:kanga26@live.com.au">kanga26@live.com.au</a>
Ngunawal Heritage Aboriginal Corporation	Mobile: 0412 176 081 Fax: (07) 5630 8597 Email: <a href="mailto:ngunawalhac@gmail.com">ngunawalhac@gmail.com</a>
Onerwal Local Aboriginal Land Council	Phone: (02) 6226 5349 Email: <a href="mailto:onerwal1@gmail.com">onerwal1@gmail.com</a>

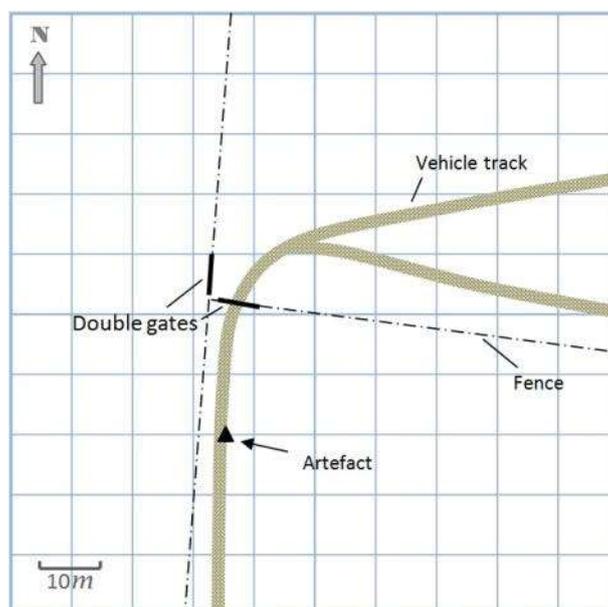
## Appendix B: Aboriginal Object Locales

### *Bango WF Survey Unit 4/Locale 1*

One stone artefact was recorded in an area of vehicle track exposure in this locale within Survey Unit 4. The landform is a broad crest of very gentle gradient and an open aspect. The artefact was located in an area measuring 50m x 5m, of which 20% was ground exposure, possessing 80% archaeological visibility. The effective survey coverage is high, and given that one artefact only was recorded, artefact density is assessed to be very low. The vehicle track area is highly disturbed, but away from this, additional artefacts may be present in a subsurface context, although these would be distributed at very low density.



*Bango WF SU4/L1 looking 285°*

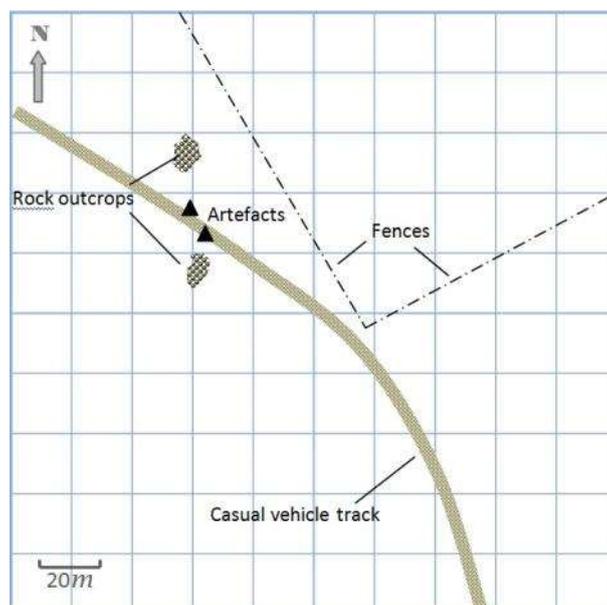


*Bango WF Survey Unit 8/Locale 1*

Five stone artefacts (plus 3 quartz *possible* artefact pieces) were recorded in a vehicle/animal track exposure at this locale in Survey Unit 8; the artefacts were in an area of 10 x 3m. The landform is broad undulating crest with very gentle gradient and open aspect. The artefacts were located in an exposure measuring 100m x 5m (overall), of which 60% was ground exposure, possessing 90% archaeological visibility. The effective survey coverage is high, and given that only five artefacts were recorded, artefact density is assessed to be very low. The site has subsurface potential given some depth to the soils, but artefact density is predicted to be very low.



*Bango WF SU8/L1 looking 300°.*

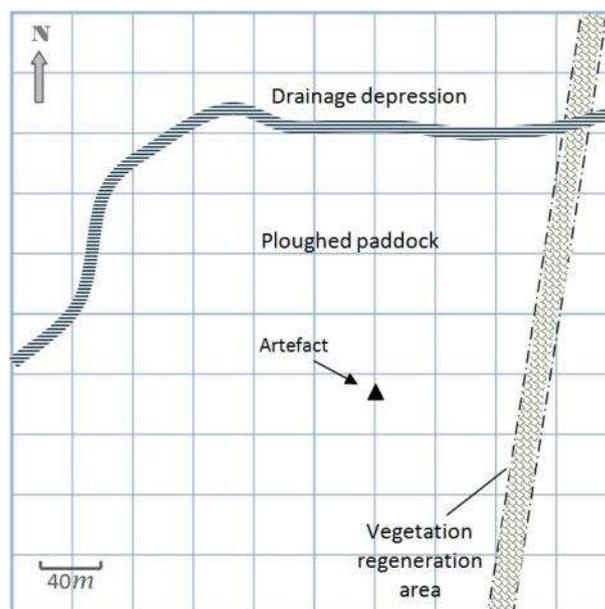


*Bango WF Survey Unit 9/Locale 1*

One stone artefact was recorded in a previously ploughed paddock at this locale within Survey Unit 9. The landform is a simple slope with gentle gradient and an aspect to 30°. The broad paddock area possesses 30% ground exposure, with 60% archaeological visibility. The effective survey coverage within the entire paddock is high and given that one artefact only was recorded it is assessed to be a genuine isolated find, and artefact density for this locale is assessed to be very low. The site has subsurface potential given some depth to the soils, and artefact density is predicted to be very low.



*Bango WF SU9/L1 looking 300°*



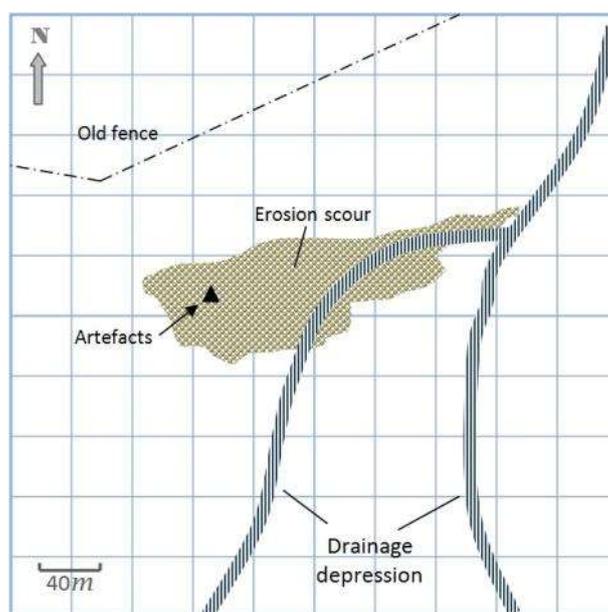
Sketch map showing location of *Bango WF SU9/L1*

*Bango WF Survey Unit 9/Locale 2*

Five stone artefacts and 3 possible quartz artefact pieces were recorded in an extensive area of sheet and gully erosion in this locale within Survey Unit 9. The landform is a simple slope of gentle gradient and an aspect to 90°. The artefacts were located in an area of 50 x 50 m, within a broader area (75 x 85m) which has 10% ground exposure, of which 90% was archaeological visibility. The effective survey coverage is high, and artefact density is assessed to be very low. The locale may contain additional artefacts (in areas which have not sustained erosion), but these would be present in very low density. To the east, nearer to the creek line, there is some subsurface potential and artefact density is assessed to be low/moderate.



*Bango WF SU9/L2 looking 230°*



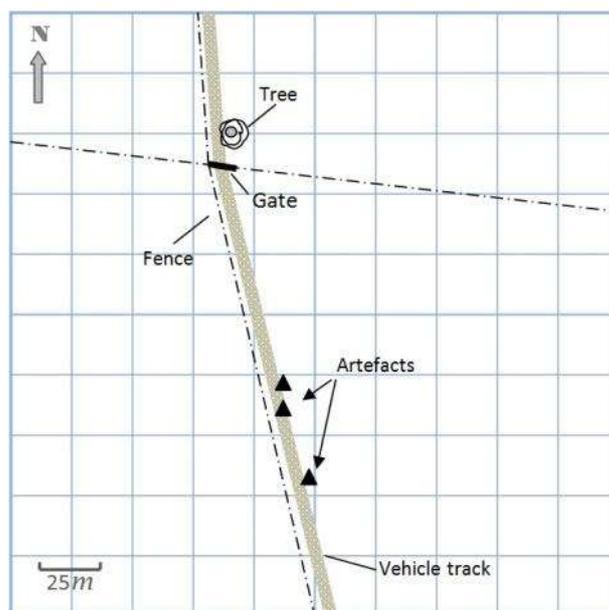
Sketch map showing location of *Bango WF SU9/L2*

*Bango WF Survey Unit 14/Locale 1*

Seven stone artefacts were recorded in an area of vehicle track exposure in this locale within Survey Unit 14. The landform is a broad crest of very gentle gradient and an aspect to 150°. The artefacts were in an area of exposure measuring 75 x 3m, possessing ground exposure of 50%, of which 60% was archaeological visibility. The effective survey coverage during field survey was high, and artefact density is assessed to be very low. The locale has subsurface potential given some depth to the soils, and artefact density is predicted to be very low.



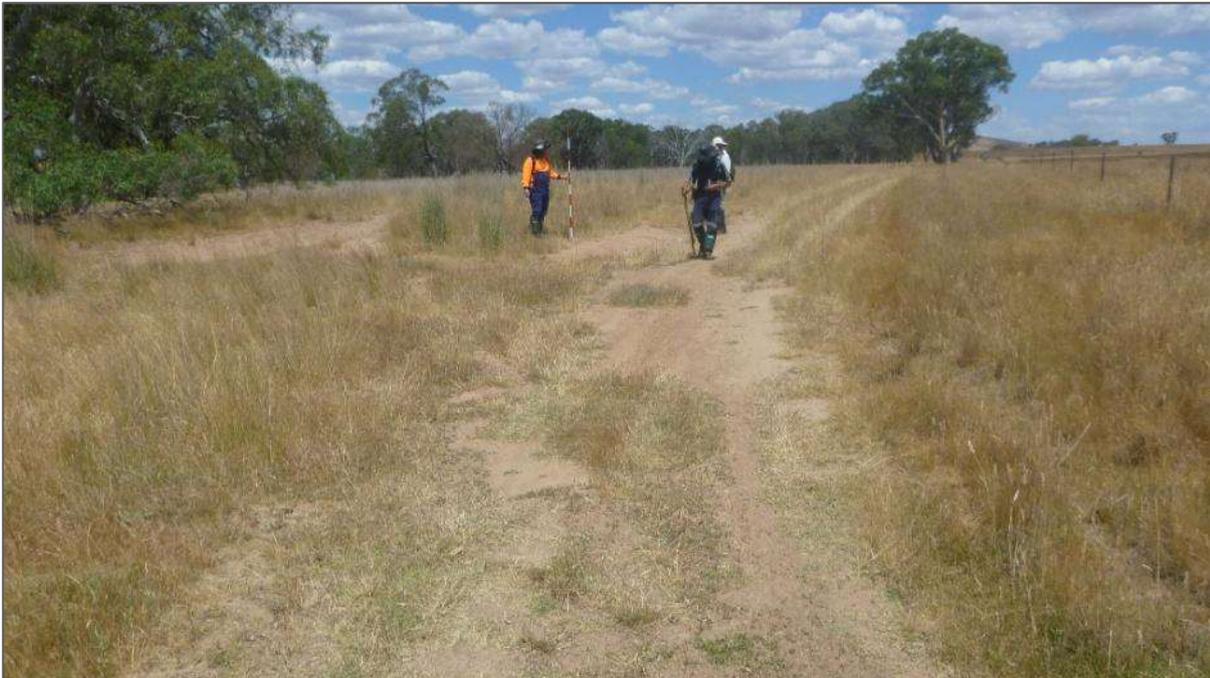
*Bango WF SU14/L1 looking 150°*



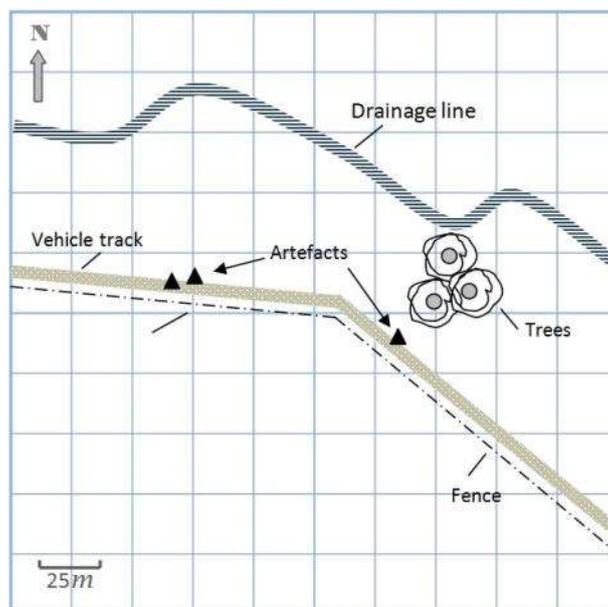
Sketch map showing location of *Bango WF SU14/L1*

*Bango WF Survey Unit 16/Locale 1*

Five stone artefacts were recorded in an area of vehicle track exposure at this locale within Survey Unit 16. The landform is a basal slope of very gentle gradient and open aspect, c. 60m from a creek, and is generally disturbed. The artefacts were recorded in an area measuring 125 x 2m, possessing actual ground exposure of 40%, of which 50% was archaeological visibility. The effective survey coverage is high, and artefact density is assessed to be low. The locale is predicted to contain additional artefacts, distributed at low density and in a disturbed context.



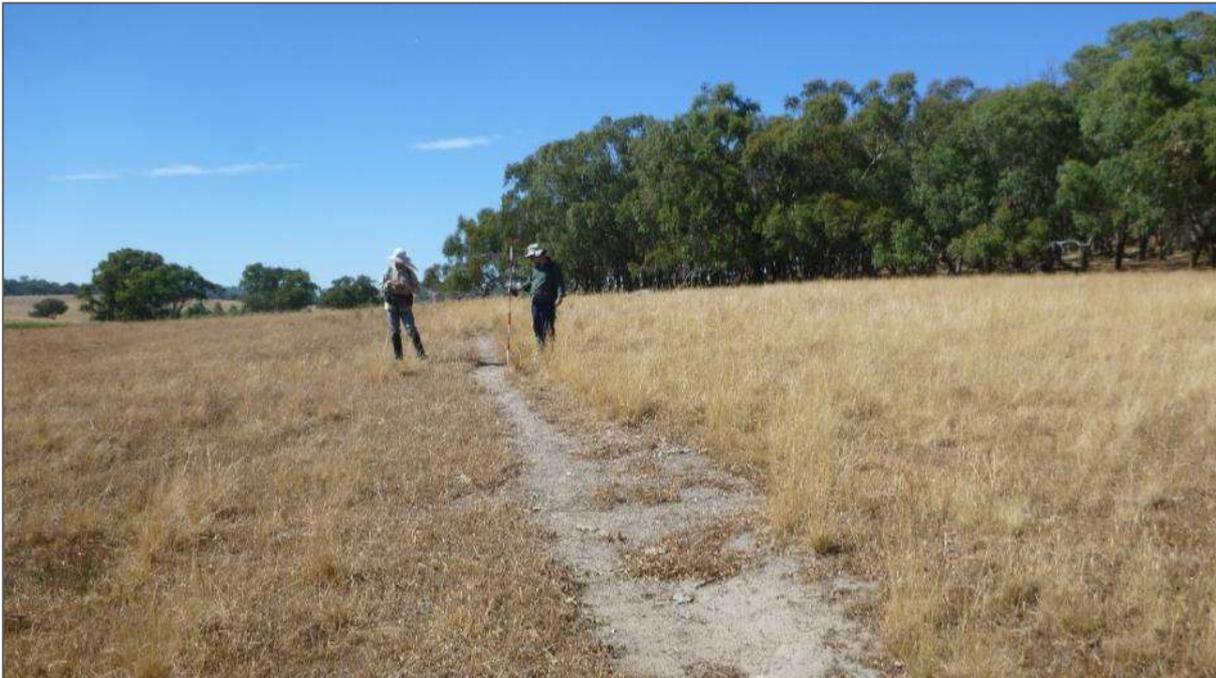
*Bango WF SU16/L1 looking 120°*



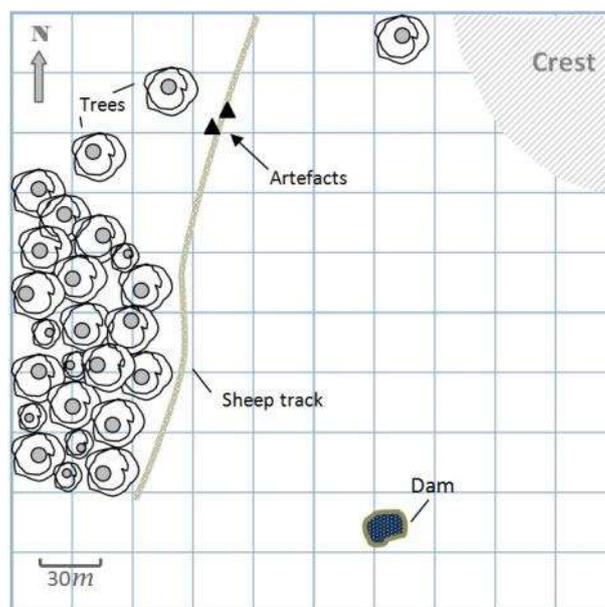
Sketch map showing location of *Bango WF SU16/L1*

*Bango WF Survey Unit 27/Locale 1*

Three stone artefacts were recorded in an area of exposure associated with an animal track in this locale within Survey Unit 27. The landform is an eroded crest of gentle gradient and an aspect to 90°. The area in which artefacts were recorded measures 30 x 0.5m of which 90% is ground exposure, possessing 90% archaeological visibility. The effective survey coverage is high, and artefact density is assessed to be low. The locale may contain additional artefacts, with some subsurface potential, but these would be present in low density.



*Bango WF SU27/L1 looking 175°*



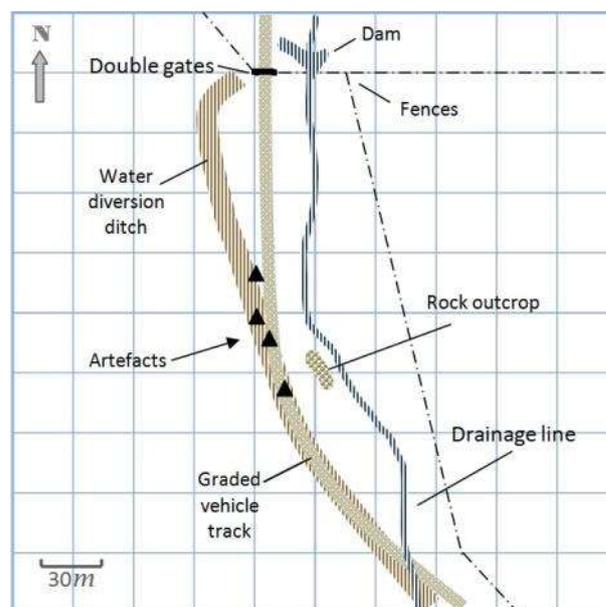
Sketch map showing location of *Bango WF SU27/L1*

*Bango WF Survey Unit 31/Locale 1*

Seventeen stone artefacts were recorded in a highly disturbed area of ground exposure associated with a graded vehicle track and accompanying water diversion ditch within this locale. The landform is an upper slope/open depression interface with gentle gradient and northerly aspect. The artefacts were located in an area of 75 x 3m, within a broader 150 x 50m area possessing 80% ground exposure, of which 80% was archaeological visibility. The effective survey coverage is high, and artefact density is assessed to be low/moderate. The upper section of the soil profile throughout much of this locale has been removed through the construction of the vehicle track and water drainage ditch so that while there may be subsurface artefacts present, these would be situated in a highly disturbed context.



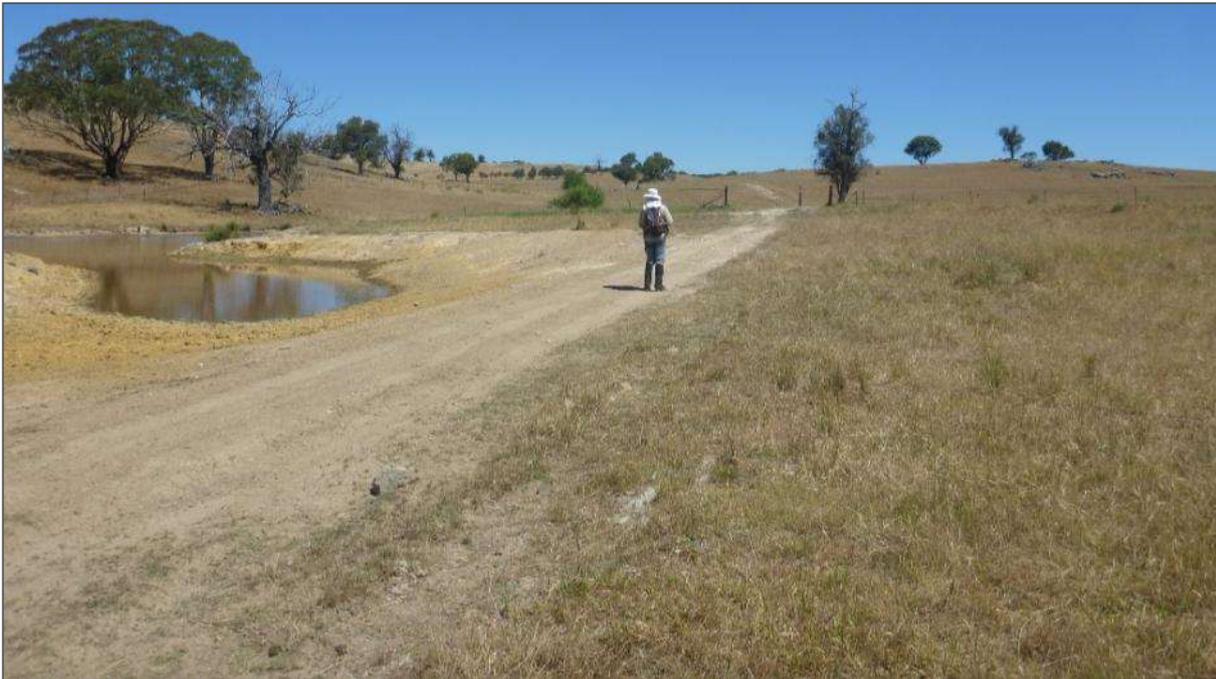
*Bango WF SU31/L1 looking 160°*



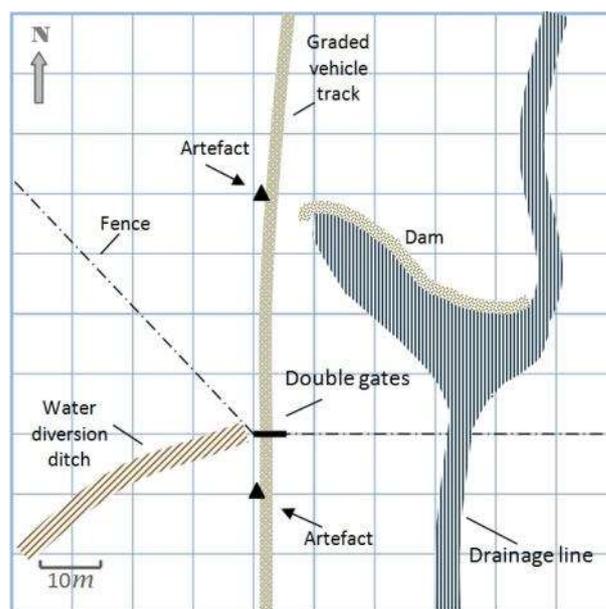
Sketch map showing location of *Bango WF SU31/L1*

*Bango WF Survey Unit 31/Locale 2*

Three stone artefacts were recorded in an area of vehicle track ground exposure at this locale within Survey Unit 31. The landform is a upper slope/open depression interface of very gentle gradient and an aspect to 300°. The artefacts were located in an area measuring 50 x 3m, with 80% ground exposure of which 60% was archaeological visibility. The effective survey coverage is high, and artefact density is assessed to be low/moderate. This locale is highly disturbed due to the construction of a water drainage ditch and the vehicle track, wherein soils have been imported and used as road base. Accordingly, while there may be subsurface artefacts situated within this locale, these would be present in a highly disturbed context.



*Bango WF SU31/L2 looking 150°*



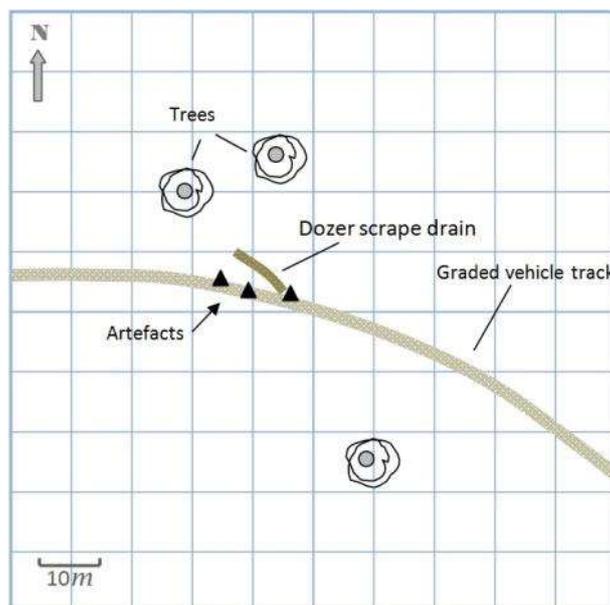
Sketch map showing location of *Bango WF SU31/L2*

*Bango WF Survey Unit 33/Locale 1*

Three stone artefacts, probably derived from the same knapping event, were recorded in a 10 x 3m area of ground exposure associated with an eroded and graded vehicle track in this locale within Survey Unit 33. The landform is a crest of very gentle gradient and an open aspect. The effective survey coverage is high, and given that these were the only artefacts recorded, it is surmised that they were produced as the result of an isolated knapping event. The locale may contain additional artefacts, but these would be present in low density and in a disturbed context due to track grading works.



*Bango WF SU33/L1 looking 270°*



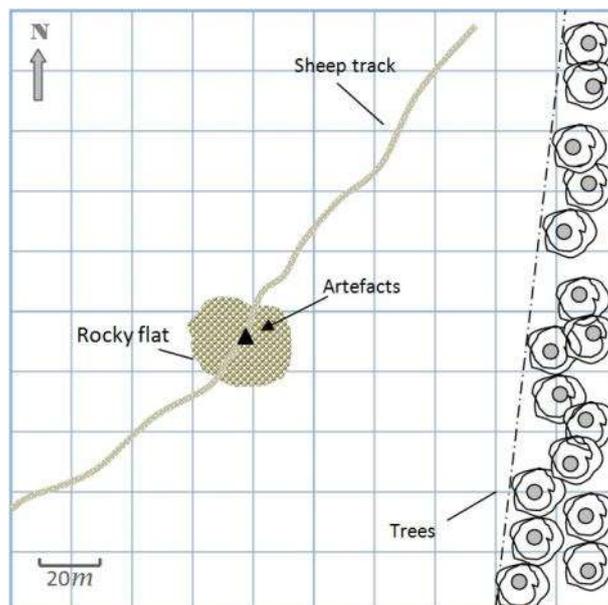
Sketch map showing location of *Bango WF SU33/L1*

*Bango WF Survey Unit 33/Locale 2*

Two stone artefacts (8 m apart) were recorded in an area of bare earth exposure in this locale within Survey Unit 33. The area is a slight rise which is very rocky. The landform is a crest of very gentle gradient and open aspect. The broader area has ground exposure of 30%, of which 60% was archaeological visibility. The effective survey coverage is reasonable, and given that two artefacts only were recorded, artefact density is assessed to be very low. The locale may contain additional artefacts, but these would be present in very low density. Because of the skeletal nature of the lithosol the site has no subsurface potential.



*Bango WF SU33/L2 looking 230°*



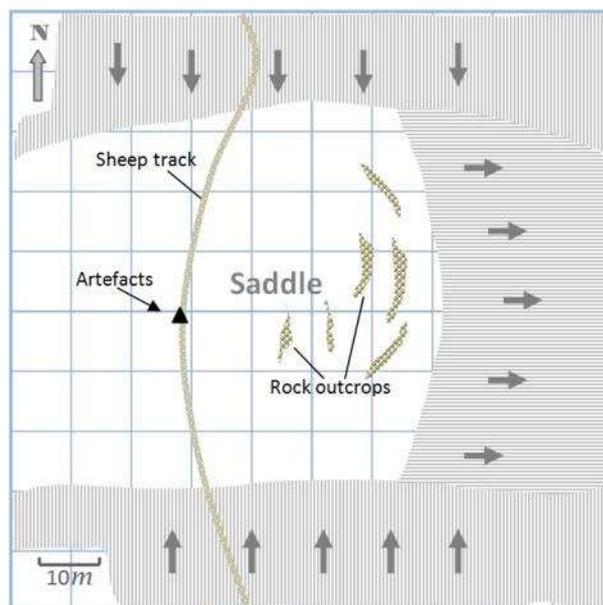
Sketch map showing location of *Bango WF SU33/L2*

*Bango WF Survey Unit 34/Locale 1*

Two stone artefacts (c. 2 m apart) were recorded in an area of bare earth exposure in this locale within Survey Unit 34. The landform is a saddle of gentle gradient and open aspect. The broader saddle area has ground exposure of 10%, of which 90% was archaeological visibility. The effective survey coverage is reasonable, and given that two artefacts only were recorded, artefact density is assessed to be very low. The locale may contain additional artefacts, but these would be present in very low density. Because of the skeletal nature of the lithosol the site has limited subsurface potential.



*Bango WF SU34/L1 looking 0°*



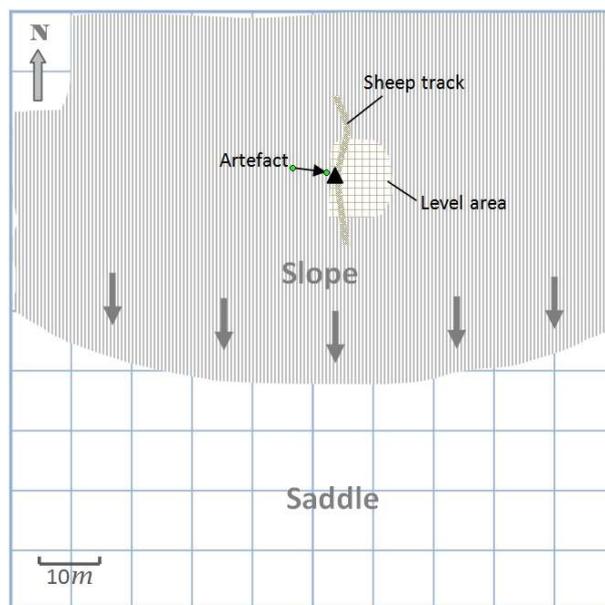
Sketch map showing location of *Bango WF SU34/L1*

*Bango WF Survey Unit 34/Locale 2*

One stone artefact was recorded in an area of bare earth exposure in this locale within Survey Unit 34. The landform is a crest of gentle gradient and an aspect to 150°. The broader crest area has ground exposure of 10%, of which 60% was archaeological visibility. The effective survey coverage is reasonable, and given that one artefact only was recorded, artefact density is assessed to be very low. The locale may contain additional artefacts, but these would be present in very low density. Because of the skeletal nature of the lithosol the site has no subsurface potential.



*Bango WF SU34/L2 looking 0°*



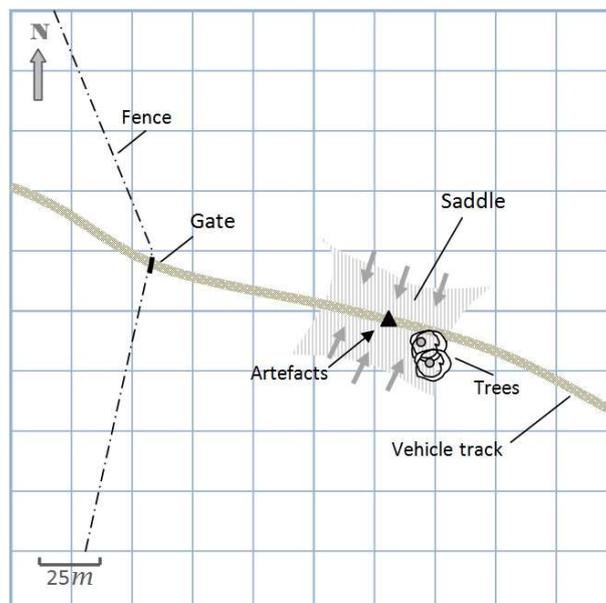
Sketch map showing location of *Bango WF SU34/L2*

*Bango WF Survey Unit 40/Locale 1*

Two stone artefacts were recorded in an area of bare earth exposure in this locale within Survey Unit 40. The landform is a saddle on a crest of gentle gradient. The broader area has ground exposure of 5%, of which 90% was archaeological visibility. The effective survey coverage is reasonable, and given that two artefacts only were recorded, artefact density is assessed to be very low. The locale may contain additional artefacts but these would be present in very low density. Because of the eroded and skeletal nature of the lithosol the site has no subsurface potential.



*Bango WF SU40/L1 looking 150°*



Sketch map showing location of *Bango WF SU40/L1*

## Appendix C: Aboriginal Object Locales – Impact minimisation

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NSW Archaeology Pty Ltd was commissioned by CWP Renewables to relocate and demarcate previous recorded Aboriginal object locales that have the potential to be impacted by future works at the proposed Bango Wind Farm. This was undertaken on 25 March 2019 by Andrew Pearce and Jo Dibden, NSW Archaeology Pty Ltd, and Tegan Doblinger, CWP Renewables Pty Ltd. This brief report outlines and documents this work.

The subject Aboriginal object locales were identified and recorded during a previous Aboriginal heritage survey undertaken by NSW Archaeology Pty Ltd in 2013. Due to the redesigning of elements of the original wind farm layout, a number of Aboriginal object locales recorded then are now outside areas of proposed impacts. However, SU16/L1, SU31/L1 and SU31/L2 do fall within proposed impact areas and in order to ensure they are not impacted by works, they require relocation and demarcation (Table 1).

In addition, SU27/L1 was identified to be situated in some vicinity of an area of proposed works. Its status was physically checked while in the field and it was determined that this Aboriginal object locale was outside the impact corridor. Nevertheless, as a safety measure the locale was marked out to avoid any inadvertent harm.

Aboriginal object locale SU16/L1 (Plate 1) is situated immediately adjacent and to the north of an existing farm fence line. In order to avoid this site it was determined that impacts in this area, which entails the construction of an access track, should be relocated to the southern side of the fence, away from the nearby creek, and into a heavily worked paddock (Plate 2).



Plate 1. SU16/L1 looking east.



Plate 2. Yellow line showing the fence line adjacent to SU16/L1, any impacts should be relocated to the south of this fence.

Aboriginal object locales SU31/L1 and SU31/L2 (Plate 3) are situated to the west of a south to north running drainage line. The locales area reasonably closely sited, and the proposed impact for both is the construction of an access track. It was determined in the field that the most expedient way to avoid both locales was to construct the track to the west of existing water diversion mounds (Plate 4), in areas which had already been impacted through the construction of those mounds.



Plate 3. SU31/L1 looking southeast.



Plate 4. SU31/L1 and SU31/L2 with the yellow line delineating the position where water diversion mounds are situated. Any impacts should be relocated to the west of this mark.

Locale	Proposed Impact	New Location	Grid Points
SU16/L1	Access track	To the south of the existing adjacent paddock fence	To the south of the line formed by: 660655e.6175630n; 660634e.6175655n; 660523e.6175667n.
SU31/L1 & SU31/L2	Access track	To the west of the existing water diversion mounds	To the west of the line formed by: 671816e.6170295n; 671820e.6170072n; 671854e.6169967n; 671877e.6169872n; 671949e.6169796n;

Table 1. Grid references delineating the areas where proposed impacts should be relocated.