

NEOEN

SSD-10807896

THUNDERBOLT WIND FARM

APPENDIX I

Heritage Management Plan

20 SEPTEMBER 2024

NEOEN AUSTRALIA PTY LTD

THUNDERBOLT WIND FARM

SSD-10807896

HERITAGE MANAGEMENT PLAN

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REVISIONS

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ACRONYMS AND DEFINITIONS

Acronym	Definition
АСНА	Aboriginal Cultural Heritage Assessment
AHIMS	Aboriginal Heritage Information System
AS	Artefact Scatter
CCS	Community Communication Strategy
CEMP	Construction Environmental Management Plan
СоА	Conditions of Approval
CoC	Condition of Consent
Construction	Includes all work required to construct the Project as described in the EIS and RtS (NSW CoA A1) including commissioning trials of equipment and temporary use of any part of the Project but excluding Low Impact Work which is carried out or completed before approval of the EMS.
DAWE (Cth)	Department of Agriculture, Water and Environment (now DCCEEW)
DCCEEW (Cth)	Commonwealth Department of Climate Change, Energy, Environment and Water (formerly DAWE)
DCCEEW (NSW)	NSW Department of Climate Change, Energy, Environment and Water (formerly DPE)
Development Corridor	The assessment of the Project has focused on a Development Corridor, which forms a buffer to the conceptual project layout (50 m buffer either side of the centreline of internal access tracks and a 140 m buffer to the WTG locations). The Development Corridor is approximately 568 ha, with a total disturbance area (contained within the Development Corridor) of approximately 215 ha.
DPHI	Department of Planning, Housing and Industry (formerly DPE)
EIS	Environmental Impact Statement
EMM	Environmental Management Measures
EMS	Environmental Management Strategy
EP&A Act	Environmental Planning and Assessment Act 1979
EPBC Act	Environmental Protection and Biodiversity Conservation Act 1999
EPL	Environment Protection Licence
EWMS	Environmental Work Method Statement
ННА	Historical Heritage Assessment
HMP	Heritage Management Plan
IA	Isolated Artefact
IPC	Independent Planning Commission
km	Kilometre
NPW Act	National Parks and Wildlife Act 1974
NPW Regulation	National Parks and Wildlife Regulation 2009
O&M	Operation and Maintenance

Acronym	Definition
OEH	NSW Office of Environment and Heritage (now NSW EES, a part DCCEEW)
PADs	Potential Archaeological Deposit
Planning Secretary	Secretary to the DPHI
Project Area	The Project Area encompasses two freehold properties and is approximately 5,918 ha. The Project Area includes the Development Corridor (See Figure 1-2).
Proponent	Neoen Australia Pty Ltd
RtS	Response to Submissions
SEARs	Secretary Environmental Assessment Requirements
SSD	State Significant Development
The Project	Thunder Wind Farm
TWF	Thunderbolt Wind Farm
WTG	Wind Turbine Generator

1 INTRODUCTION

1.1 Context

This Heritage Management Plan (HMP or Plan) forms part of the Environmental Management Strategy (EMS) for the Thunderbolt Wind Farm construction (TWF) (the Project).

This HMP has been prepared to address the requirements of the NSW Minister's Conditions of Consent (CoC), Commonwealth Conditions of Approval (CoA), the Environmental Management Measures (EMMs) detailed in the Response to Submissions (RtS) and the applicable legislation (Section 3.1.1). This HMP and the cultural heritage investigations it is based upon (Section 1.2) have been prepared in accordance with the guidelines listed in Section 3.1.3.

1.2 Background and Project Description

Neoen Australia Pty Ltd (Neoen or the Proponent) proposes to develop the Thunderbolt Wind Farm to generate wind energy to supply New South Wales (NSW) with renewable electricity. The proposed Thunderbolt Wind Farm (the Project) is located within the Kentucky area of NSW, approximately 47 kilometres (km) northeast of Tamworth and adjacent to the New England Highway (refer to Figure 1-1).

An Environmental Impact Statement (EIS) for the Project was prepared in April 2022 to describe and assess the Project and recommend management measures to address impacts. The EIS was exhibited by the then NSW Department of Planning and Environment (DPE)¹ from 27 April 2022 to 24 May 2022 to give the community and stakeholders the opportunity to provide comment. A Response to Submissions (RtS) was submitted in August 2023 to address the identified issues.

Approval for the Project was granted by the Independent Planning Commission (IPC) on 8 May 2024, (SSD-10807896), under Division 4.7 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as State Significant Development (SSD). A detailed description of the Project is provided in Section 2 of the EMS.

This Project was also deemed a controlled action under the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* (EPBC Number: 2021/9048) on 28 October 2021. It was assessed under the bilateral agreement between the NSW and Commonwealth Governments.

The Project comprises up to 32 wind turbine generators (WTGs) and associated infrastructure (ie internal access roads, operation and maintenance (O&M) buildings) and substation and switching station required to connect to the existing 330 kV transmission network. The Project also includes a temporary above ground pipeline to an existing dam located to the southwest of the Project Area and temporary water storage facilities within the proposed project laydown compound.

The EIS assessed the impacts of construction of the Project on heritage. As part of EIS development, a detailed Aboriginal Cultural Heritage Assessment (ACHA) report and Historical Heritage Assessment (HHA) were prepared in accordance with the legislation. The ACHA (Umwelt, March 2022) and HHA (Umwelt, December 2021) were prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued by the now DPHI and the Commonwealth EIS Guidelines issued by the Commonwealth the then Department of Agriculture, Water and Environment (DAWE). The ACHA was included as Appendix 14 in the EIS, and the HHA included as Appendix 15.

¹ Now Department of Planning, Housing and Infrastructure (DPHI)

Further assessment of heritage impacts was undertaken after exhibition of the EIS and incorporated an Archaeological Report (Lantern, August 2023). This report detailed the outcome of test excavations carried out at four areas identified as Potential Archaeological Deposits (PADs). The Archaeological Report was included in the RtS as Appendix 5.

Following submission of the RtS (Umwelt, August 2023), Heritage NSW requested that the identified Aboriginal Heritage Information System (AHIMs) sites detailed in the Archaeological Report (Lantern, August 2023) were registered as PADs, rather than as discrete concentrations of artefacts. Both the updated ACHA (Umwelt, November 2023) and the Archaeological Report (Lantern, November 2023) reflect this new information and supersede the AHIMS references and figures showing the no-go zones within the RtS. The HMP has therefore been prepared based on the more recent updated information on AHIMS site cards and the Archaeological Report (Lantern, November 2023).

The Environmental Management Measures (EMMs) provided within the RtS have also been updated to reflect the new naming convention of archaeological sites within the development corridor, and their recommended mitigation. These updated EMMS are provided in Section 3.4.

1.3 Staged Submission of this Plan

In accordance with NSW CoC C3, the Proponent has elected to stage the submission of the HMP (NSW CoC C4-C6). Staging was approved by the Secretary on 31 July 2024 (Appendix A).

The HMP will be staged as follows:

- Stage 1: Construction of the TWF
- Stage 2: Operation of the TWF
- Stage 3: Decommissioning of the TWF at end of life.

Consultation with the relevant stakeholders has commenced for Stage 1. All later stages of the HMP will also include necessary consultation with the relevant stakeholders, including the Registered Aboriginal Parties (RAPs). Each Staged revision of the HMP will be approved by the Secretary, prior to the commencement of each stage.

This HMP is for Stage 1 Construction only and will be updated prior to the commencement of operation and decommissioning when appropriate.

1.4 Scope of the Plan

This HMP describes how potential impacts to heritage, both Aboriginal and non-Aboriginal, will be managed during Stage 1 construction only. Operational impacts on heritage and operation measures do not fall within the scope of this HMP and therefore are not included within the processes contained within this Plan.

1.5 Environmental Management System Overview

The environmental management framework for the Project is described in Section 3 of the EMS. This HMP forms part of the framework for the Project. The requirements of the NSW CoC and Commonwealth CoA and the MMs identified in this HMP will be complied with during construction.

Management measures identified in this HMP may also be incorporated into site or activity specific Environmental Work Method Statements (EWMS). EWMS incorporate appropriate mitigation measures and controls and identify key procedures to be used during construction activities. A template EWMS for use is provided in Appendix D of the EMS.

1.6 HMP Approval

This HMP has been prepared to satisfy the NSW CoC and Commonwealth CoA's in relation to heritage management during construction of the Project.

This HMP will be reviewed by the Neoen Project Manager and submitted to the Planning Secretary for approval. Construction of the Project will not commence prior to the approval of the HMP by the Planning Secretary.

1.6.1 Interactions with Other Management Plans

This HMP has the following interrelationships with other management plans and documents:

- Heritage sites to be retained in close proximity to the Project will be detailed on Sensitive Area Plans provided in Appendix C of the EMS.
- Construction Noise and Vibration migration measures detail the assessment and monitoring of potential vibration impacts, including on heritage items. These are provided in Section 5.5 of the EMS.

1.7 Consultation

1.7.1 Consultation for Preparation of the HMP

The following government agencies and stakeholders have been consulted during the development of this HMP:

- Heritage NSW
- Registered Aboriginal Parties (RAPs)

A summary of the outcomes of the consultation with various agencies and RAPs is provided in Table B1 included in **Appendix B**.

Supplementary information demonstrating the consultation undertaken is also included in **Appendix B**.

1.7.2 Ongoing Consultation during Construction

Ongoing consultation will include, but not be limited to:

- Consultation with key stakeholders during the development and implementation of the plan
- Consultation in the event of any unexpected Aboriginal, historic or natural heritage being found during the construction of the Project
- Consultation with the RAPs regarding appropriate mitigation measures for Potential Stone Arrangements 2-4
- Consultation with the RAPs will continue on a six-monthly basis during construction of the Project.

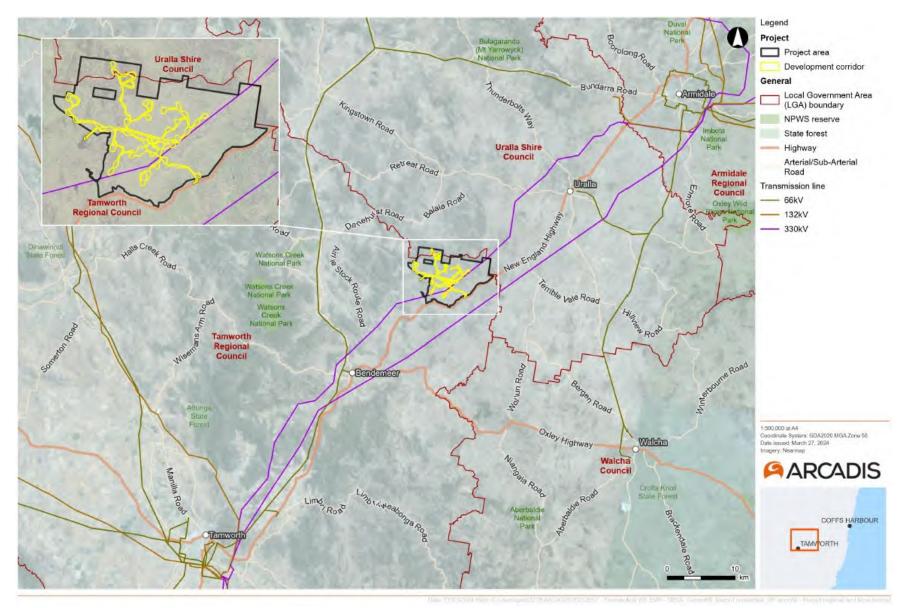


Figure 1-1: Project regional and local context

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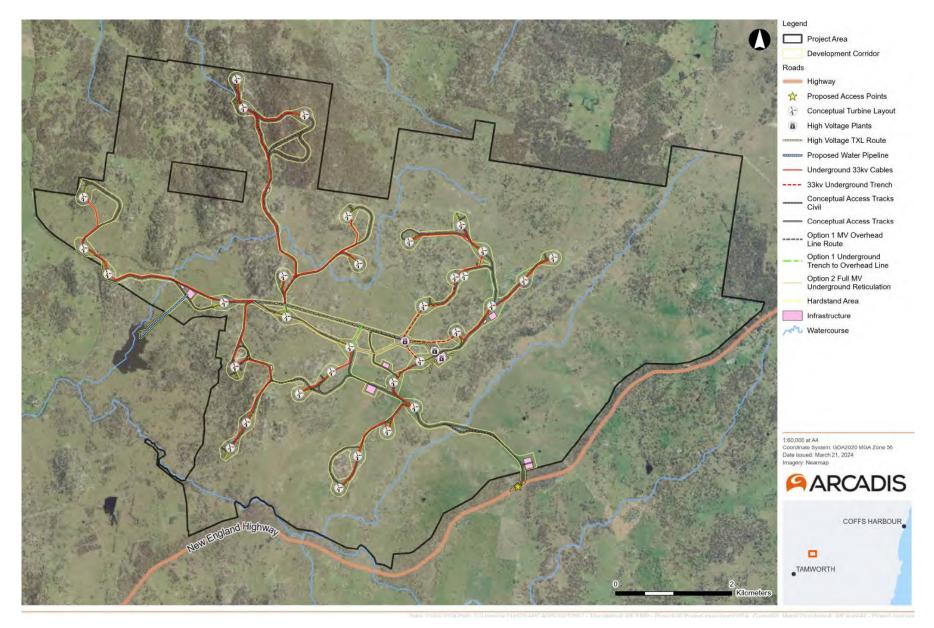


Figure 1-2: Project overview

2 PURPOSE AND OBJECTIVES

2.1 Purpose

The purpose of this Plan is to describe how impacts on heritage will be minimised and managed during the construction of the Project.

2.2 Objectives

The key objective of the HMP is to ensure that heritage impacts are managed appropriately throughout the construction of the Project and that the mitigation and management measures referred to in the following documentation is considered:

- Independent Planning Commission of NSW Development Consent dated 8 May 2024 (SSD-10807896)
- Federal Minister for the Environment Approval (EPBC 2021-9048)
- *Thunderbolt Energy Hub Environmental Impact Statement* prepared by Umwelt for Neoen Pty Limited dated March 2022 (EIS)
- *Thunderbolt Wind Farm Response to Submissions* prepared by Umwelt for Neoen Pty Limited dated August 2023 (RtS)
- *Environmental Management Plan Guideline for Infrastructure Projects* (Department of Planning, Industry and Environment, 2020) (the DPIE Guideline).

2.3 Targets

The purpose of this HMP is to describe measures for managing heritage during construction in accordance with Specific, Measurable, Achievable, Realistic and Timely (SMART) principles.

- Specific Heritage mitigation and management measures (Section 6.7 and Table 6-2) of this Plan specifically address the Construction Contractor's approach to managing heritage impacts during construction.
- Measurable Inspection and monitoring requirements detailed in Section 7.3 of this Plan include specific measures or indicators for which inspection and monitoring requirements will be triggered.
- Achievable Ongoing compliance with the relevant CoCs, and EMM requirements (Table 3-1 and Table 3-2, respectively), is achievable throughout the delivery of the TWF construction work and represents the minimum requirements to be implemented by the Construction Contractor
- Relevant The management measures outlined in Section 6.7 of this Plan represent the Construction Contractor's approach to monitoring and tracking against objectives, targets and environmental performance outcomes
- Time-bound On a broader scale, the management measures set out within Section 6.7 of this Plan are required to be implemented for the duration of construction, setting a clear and defined time frame and includes reference to other temporal applications, including during detailed design, pre-construction, post-construction and/or operation.

Table 2-1 details the targets established for the management of heritage impacts during construction of the Project.

Objective	Target	Timeframe	Responsibility
Ensure compliance with all relevant NSW CoC, EPBC CoA and legislation applicable to items of Heritage	No written warnings or infringement notices Zero non-compliance	Throughout construction	Neoen Construction Contractor
Avoid impacts to Heritage items	No impacts to heritage items and no reportable incidents	Throughout construction	Neoen Construction Contractor
Follow correct procedures and ensure notification of any previously unidentified historical objects/places during construction	No impacts to heritage items	Throughout construction	Neoen Construction Contractor
Ensure Aboriginal Cultural Heritage Awareness Training is provided to all personnel in the form of induction before they begin work on site	Aboriginal Cultural Heritage Awareness Training is to be provided to all personnel	Throughout construction	Neoen Construction Contractor

3 ENVIRONMENTAL REQUIREMENTS

3.1 Relevant Legislation and Guidelines

3.1.1 Legislation

All legislation relevant to the Project is included in Appendix B of the EMS. Legislation considered during the development of this Plan includes:

- Environmental Planning and Assessment Act 1979 (EP&A Act) (NSW)
- Environmental Planning and Assessment Regulation 2021
- Heritage Act 1977 (NSW)
- National Parks and Wildlife Act 1974 (NPW Act) (NSW)
- National Parks and Wildlife Regulations 2019 (NSW)
- National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010
- Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth)
- Native Title Act 1993 (Commonwealth).

3.1.2 Additional Approvals, Licences, Permits and Requirements

Refer to Appendix B of the EMS.

3.1.3 Guidelines and Standards

The main guidelines, specifications and policy documents relevant to this Plan include:

- Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010)
- Key elements of the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011)
- Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW 2010)
- The Burra Charter: The Australian ICOMOS Charter for Places of Cultural Significance 1999 (Australia ICOMOS. 2000) (The Burra Charter)
- Assessing Significance for Historical Archaeological Sites and 'Relics' (Heritage NSW, 2009)
- The Historical Archaeology Code of Practice (Heritage NSW, 2006).

3.2 Commonwealth Approval

This Project was also deemed a controlled action under the Environment Protection and Biodiversity Conservation (EPBC) Act 1999 (EPBC Number: 2021/9048) on 28 October 2021. It was assessed under the bilateral agreement between the NSW and Commonwealth Governments and approved on 8 May 2024.

3.3 NSW Development Consent

The requirements of the Development Approval relevant to the development of this HMP are shown in Table 3-2. These are defined as 'primary NSW CoC' and specifically relate to the development of the HMP. A cross reference is also included to indicate where the CoC is addressed in this Plan or other Project documentation.

Table 3-1: Primary NSW CoC relevant to the HMP

No.	Requirements	Document reference	
Protection	n of Heritage Items		
B28	The Applicant must:		
(a)	ensure the development does not cause any direct or indirect impacts to Aboriginal heritage items identified in Table 1 of Appendix 6 , and any items located outside the disturbance area;	Section 5 Table 5-3	
(b)	implement all reasonable and feasible measures to avoid and minimise harm to Aboriginal heritage items identified in Table 2 of Appendix 6 ; and	Section 6 Table 5-2 Table 6-1	
(c)	salvage and relocate items that would be impacted to a suitable alternative location, in accordance with the Heritage Management Plan described in condition B29. <i>Note: The location of the Aboriginal heritage items referred to in this condition are</i> <i>shown in the figure in Appendix 6.</i>	Section 6.2 Section 6.3	
Heritage N	Management Plan		
B29	Prior to carrying out any works associated with the development that could directly or indirectly impact the heritage items identified in condition B28, the Applicant must prepare a Heritage Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:	This Plan	
(a)	be prepared by a suitably qualified and experienced person whose appointment has been endorsed by the Planning Secretary;	Page i Appendix A	
(b)	be prepared in consultation with Aboriginal stakeholders and reviewed by Heritage NSW;	Section 1.7 Appendix B	
(c)	provide an updated list of Aboriginal heritage items identified in condition B28 that would be protected and remain in-situ throughout construction and items that would be salvaged and relocated to suitable alternative locations;	Table 5-2 Table 5-3 Section 6.1 Section 6.2 Section 6.3	
(d)	include a justification where impacts to Aboriginal heritage items identified in condition B28(b) cannot be avoided;	Section 6.1 Section 6.2 Section 6.3	
(e)	include a description of the measures that would be implemented for:(i) protecting heritage items in accordance with condition B29;	Table 6-1	
(e)	 (ii) minimising and managing the impacts of the development on Aboriginal heritage items identified in condition B28(b) which cannot be avoided, including; salvaging and relocating items to suitable alternative locations; and a strategy for the long-term management of any Aboriginal and historic heritage items or material collected during the test excavation and salvage works; 	Section 6.1 Section 6.2 Section 6.3 Section 6.7	
(e)	 (iii) a contingency plan and reporting procedure if: heritage items outside the approved disturbance area are damaged; previously unidentified heritage items are found; or skeletal material is discovered; 	Section 6.4 Section 6.5	

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No.	Requirements		Document reference
(e)	 (iv) 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 		Section 7.2
(e)	(v) ongoing consultation with Abori implementation of the plan; and	ginal stakeholders and Heritage NSW during the	Section 1.7 Appendix B
(f)) include a program to monitor and report on the effectiveness of these measures and any heritage impacts of the project.		Section 7.3
	Following the Planning Secretary's a Heritage Management Plan	approval, the Applicant must implement the	
Appendix	c 6 – Heritage Items		
	Table 1: Aboriginal heritage items –	avoid impacts	Section 5
	Item name	AHIMS site ID	Table 5-3
	TWF AS1	#20-6-0089	
	TWF AS2	#20-6-0088	
	TWF AS3	#20-6-0087	
	Possible Scarred Tree 1	-	
	Possible Scarred Tree 2	-	
	Possible Scarred Tree 3	-	
	Possible Scarred Tree 4	-	
	Potential Stone Arrangement 1	-	
	Potential Stone Arrangement 5	-	
	Table 2: Aboriginal heritage items –	avoid, minimise and/or salvage	Section 5
	Item name	AHIMS site ID	Table 5-2 Section 6
	TWF IA1	#20-6-0090	
	TWF IA2	#20-6-0091	Table 6-1
	TWF IA3	#20-6-0092	
	TWF IA4	#20-6-0093	
	Potential Stone Arrangement 2	-	
	Potential Stone Arrangement 3	-	
	Potential Stone Arrangement 4	-	
	Spring Creek 1	#20-6-0083	
	Pine Creek 1	#20-6-0086	
	Pine Creek 2	#20-6-0085	
	Pine Creek 3	#20-6-0084	

3.4 Environmental Management Measures

The EMMs identified in the RtS relevant to the development of this HMP, defined as 'primary EMMs are detailed in Table 3-2.

As discussed in Section 1.1, in response to updates to the ACHA (Umwelt, November 2023) and the Archaeological Report (Lantern, November 2023), some of the EMMs from the RtS have since been updated to reflect the changes to the AHIMS sites. These changes are shown in Table 3-3 as either strikethrough (for text that has been removed), or bold and underlined text (for added text).

A cross reference is also included to indicate where the EMM is addressed in this Plan or other Project documentation.

Table 3-2: Primary EMMs relevant to the development of this Plan

No.	Requirements	Timing	Document reference
Aboriginal A	rchaeology		
EMM35-AH	Ensure that all employees and contractors are aware that it is an offence under Section 86 of the NPW Act to harm or desecrate an Aboriginal object unless that harm has been subject to approval as part of the necessary approvals process.	Construction and Operation	Section 7.2
EMM36-AH	An Aboriginal cultural heritage management plan (ACHMP) for the Project will be developed in consultation with the registered Aboriginal parties, including:	Construction and Operation	This Plan
	• Protecting the Aboriginal archaeological sites and areas of archaeological potential identified in Table 3 including establishing appropriate fencing/site demarcation prior to the commencement of construction and ensuring ongoing protection during construction and operation.	Construction and Operation	Section 6.1
	• Impacts to sites and areas of archaeological potential identified in <u>Table 3 (shown below)</u> that cannot be practically avoided. This will include the provision of methodologies for the completion of the recommended mitigation activities, as referenced in Table 3. This may include surface collection, salvage excavation and/or community collection prior to or during the course of construction activities.	Construction and Operation	Section 6.2 Section 6.3
	Protocols to be followed in the instance that additional ground disturbance works are required outside the Development Corridor. This will include requirements for further survey and assessment of any such works.	Construction and Operation	Section 6.4
	• The management of any new Aboriginal archaeological sites that may be identified during these inspections or over the course of construction or operational activities.	Construction and Operation	Section 6.5
	• The management of Aboriginal skeletal remains should any be identified within the construction or operational activities for the Project.	Construction and Operation	Section 6.6
	• Monitoring and reporting on the effectiveness of these measures and to compile a report on the outcomes of any approved mitigation works.	Construction and Operation	Section 7.3 Section 7.5
	• Ensuring that all staff and contractors working on the Project receive Aboriginal cultural heritage awareness training and are informed of their obligations to comply with the requirements of the Aboriginal cultural heritage management plan.	Construction and Operation	Section 7.2
EMM36-AH	Table 3 Recommendations by site/area of archaeological potential	Construction and Operation	Section 6.1 Section 6.2 Section 6.3

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No.	Requirements			Timing	Document reference
	Sites	Proposed Management Strategy	Requirements		
	TWF AS1, TWF AS2, TWF AS3, TWF R2 Possible Scarred Trees 1-4 Potential Stone Arrangements 1 and 5	Outside Development Corridor therefore no impacts anticipated (avoidance)	Establish appropriate fencing/site demarcation prior to the commencement of construction and ensure ongoing protection during construction and operation		
	TWF IA1 (AHIMS #20-6-0090) TWF IA2 (AHIMS #20-6-0091) TWF IA3 (AHIMS #20-6-0092) TWF IA4 (AHIMS #20-6-0093) TWF R1 (repatriation site) Potential Stone Arrangements 2, 3 and 4 Spring Creek 1 (AHIMS# 20-6-0083) Pine Creek 1 (AHIMS# 20-6-0086) Pine Creek 2 (AHIMS# 20-6-0085) Pine Creek-3 (AHIMS# 20-6-0084)	Minimise impacts (micro- siting/final design demonstrates that impacts to sites can be fully or partially avoided)	Establish appropriate fencing/site demarcation of the site/area (or portion thereof that is not being impacted) prior to the commencement of construction and ensure ongoing protection during construction and operation		
		Minimise impacts (micro- siting / final design demonstrates that impacts to sites cannot be fully or partially avoided)	Surface collection of identified surface artefacts. In relation to Potential Stone Arrangements 2-4, further consultation with Aboriginal parties regarding appropriate mitigation measures for these potential sites (if required) can be undertaken as a component of the development of an Aboriginal cultural heritage management plan for the Project.		
		Minimise impacts (micro- siting / final design demonstrates that impacts to sites can be fully or partially avoided)	Establish appropriate fencing/site demarcation of the area (or portion thereof that is not being impacted) prior to the commencement of construction and ensure ongoing protection during construction and operation.		
		Minimise impacts (micro- siting/final design demonstrates that impacts to sites cannot be fully or partially avoided)	Undertake salvage excavation within the area of the PAD if efforts to minimise impacts through micro-siting are deemed to be unsuccessful.		

No.	Requirements	Timing	Document reference
Historic Herit	age		
EMM37-HH	An unexpected heritage finds protocol will be established and included in the CEMP and OEMP.	Construction and Operation	Section 6.5
EMM38-HH	All Project team members and Construction Contractors will be required to undertake a heritage-specific induction to support the use of the heritage finds protocol.	Construction and Operation	Section 7.2
EMM39-HH	During construction, in the unlikely event that unexpected historical archaeological material is discovered, all work in the area will cease and a suitably qualified archaeologist consulted to determine an appropriate course of action. Depending on the extent and significance of the archaeological remains encountered, consultation with Heritage NSW may also be required prior to the commencement of works.	Construction and Operation	Section 6.5

4 EXISTING ENVIRONMENT

4.1 Key References

The sources of data and information used to develop this Plan are:

- Section 6.6 Appendix 14 (ACHA, November 2022) of the Project EIS
- Section 6.7, Appendix 15 (HHA, December 2021) of the Project EIS
- Appendix 5 (Archaeological Report, August 2023) of the Project RtS
- ACHA (Umwelt, November 2023 version)
- Archaeological Report (Lantern Heritage, November 2023 version)

The Project boundary and relevant updated heritage data is shown on the Sensitive Area Plans included in Appendix D of the EMS.

4.1.1 Aboriginal Heritage

The ACHA (Appendix 14 of the EIS) was prepared in accordance with the relevant guidelines:

- Environmental Planning and Assessment Act 1979 (EP&A Act)
- Native Title Act 1993 (Commonwealth)
- Heritage Act 1977
- National Parks and Wildlife Act 1974 (NPW Act)
- National Parks and Wildlife Regulation 2009 (NPW Regulation)
- Principles of The Burra Charter (Australia ICOMOS 2013)
- Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010)
- Key elements of the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011)
- Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW 2010).

4.1.2 Non-Aboriginal heritage

The Historical Heritage Assessment (HHA) (Appendix 15 of the EIS) was prepared in accordance with the relevant guidelines:

- Principles of The Burra Charter (Australia ICOMOS 2013)
- Assessing Significance for Historical Archaeological Sites and 'Relics' (Heritage NSW, 2009)
- Heritage Office (Heritage NSW, 2006)

The following sections summarise existing heritage within and adjacent to the Project site.

4.2 Environmental Aspects

The Project Area encompasses two freehold properties and is approximately 5,918 ha. The EIS and RtS assessment of the Project focused on a Development Corridor within the Project Area, which allows for the micro-siting of the turbines and infrastructure (ie 50 metre buffer either side of the centreline of internal access tracks and a 140 metre buffer to the WTG locations). The Development Corridor is approximately 568 ha, with a total disturbance area (contained within the Development Corridor) of approximately 215 ha.

The following section summarises the heritage values within and adjacent to the Development Corridor, based on information contained in the EIS, RtS and Heritage assessments.

4.3 Aboriginal Cultural Heritage

4.3.1 Aboriginal Cultural Heritage Sites

Field surveys and test excavations were carried out by Umwelt in May and October 2021 to inform the EIS.

During the survey, the RAPs identified several sites that they felt may have cultural value even if not necessarily meeting archaeological criteria for the recording of sites of this type. These sites include four possible scarred trees and five potential stone arrangements, as outlined in Table 4-1.

Table 4-1: Possible Sites (as requested by Aboriginal Parties)

Name	Description
Possible scarred tree 1	Large red gum with irregularly shaped scar approximately 0.75 m long x 0.3 m wide with bulging callus regrowth. The scar twists substantially from top to bottom, potentially as a result of growth of the limb present just above the scar. From an archaeological perspective, this was considered unlikely to be a scar of Aboriginal cultural origin due to the irregularity of the scar and the indication that the scar once extended to the ground but has since healed.
Possible scarred tree 2	Dead tree with relatively small diameter trunk. The scar is present on the southwestern face of the tree and measures approximately 1.5 m by 0.1 m with approximately 0.2 m of regrowth. The tree has been subject to significant insect and lightning damage. Based on the size of the tree, the size and shape of the scar and the comprehensive damage to the tree from an archaeological perspective it is considered highly unlikely to be a scar of Aboriginal cultural origin.
Possible scarred tree 3	Large stringybark located on a crest with sub-ovoid scar approximately 2m long x 0.5m wide with up to 30 cm of regrowth. Scar twists from base to top, has irregular scarring at top and extends almost to ground level. Based on the shape of the scar and the presence of comparable damage on the tree, from an archaeological perspective it is considered unlikely to be a scar of Aboriginal cultural origin.
Possible scarred tree 4	Large eucalypt with small scar. Based on the location and dimensions of the scar, it is considered unlikely to be a scar of Aboriginal cultural origin.
Potential stone arrangement 1	This site was identified by Aboriginal parties based on the presence of a group of medium sized rough-edged granite boulders located on top of a large slightly domed granite outcrop. The Aboriginal parties felt that the boulders formed an approximate circle. Water was seeping from an area nearby and it was thought that there may be some association. From an archaeological perspective, there was no clear formation to the boulders nor was there significant difference to the appearance of other rock outcrops in the local area.
Potential stone arrangement 2	This site was identified by one Aboriginal party representative as potentially being a stone arrangement in the form of a seasonal or sun movement calendar. It comprises a large domed granite outcrop with multiple boulders present on the surface over an area of approximately 3.8 m x 1.5 m. From an archaeological perspective, there was no clear formation to the boulders nor was there significant difference to the appearance of other rock outcrops in the local area.
Potential stone arrangement 3	This site comprises an accumulation of granite boulders on a granite exposure. One of these is roughly triangular in shape and sits on edge. Based on the lichen growth, the triangular boulder previously sat flat but has then been turned on edge. From an archaeological perspective, there is insufficient evidence to demonstrate that the stones are in a clear arrangement.

Name	Description
Potential stone arrangement 4	This site was identified by the Aboriginal parties on the basis that there is a larger slab of rock with two small rocks underneath it, making it semi-level off the surface of the underlying granite. From an archaeological perspective, it is noted that rock slabs appear to fracture and stack in similar ways and there is insufficient evidence to demonstrate that this is an archaeological site.
Potential stone arrangement 5	This site was identified by Aboriginal parties based on the presence of stacked slabs on the edge of a large granite outcrop. The slabs overlie each other in two sets of three slabs sitting on top of each other. From an archaeological perspective, it is noted that rock slabs appear to fracture and stack in similar ways and there is insufficient evidence to demonstrate that this is an archaeological site.

Several new Aboriginal sites were recorded within the Project Area. The location of these sites is shown on Figure 4-1 and summarised in Table 4-2. The sites were named in the field with acronym TWF (for Thunderbolt Wind Farm) followed by AS (artefact scatter), IA (isolated artefact) or R (repatriation site for artefacts excavated during testing of PADs) and then numbered sequentially.

Table 4-2: Newly Recorded Sites

AHIMS Site ID	Name	Description
#20-6-0089	TWF AS1 *	Artefact scatter containing two artefacts located approximately five metres apart on an existing access track and outside the Development Corridor. The artefacts are a quartz flake with potential retouch and a flake of dark grey volcanic material (likely basalt). The artefacts were exposed on the access track which is subject to ongoing rill and gully erosion in sections. It is the main access track for the property, is subject to regular vehicle traffic and appears to be graded periodically. Based on the levels of disturbance, TWF AS1 has limited archaeological integrity, and the artefacts are not in their original depositional context.
#20-6-0088	TWF AS2 *	Artefact scatter containing 14 artefacts distributed along an access track at eight locations, covering an area of approximately 200 m. The site has been significantly affected by erosion, with artefacts frequently exposed on the edges of the access track where the access track has been incised into the natural soil profile and is subject to ongoing erosion. AS2 has limited integrity and is located outside the Development Corridor
#20-6-0087	TWF AS3 *	Scatter of three artefacts visible in an access track adjacent to a tributary of Pine Creek. The access track has been graded into the hillslope and is subject to significant ongoing erosion and repair. The artefacts were identified adjacent to a large gravel borrow pit and there is introduced material (including road base gravel) in the vicinity. Based on the level of impact at this location from earthworks to establish and maintain the access track, the artefacts do not retain archaeological integrity and it is likely that in situ artefacts and deposit has been removed.
#20-6-0090	TWF IA1 *	Small broken flake of banded coarse-grained material (likely quartzite) located in a small area of enhanced visibility at the base of an apple box tree. Despite the presence of a range of other exposed stone lag, no additional artefacts were present. The artefact is present on a gently inclined slope with frequent bedrock exposures approximately 100 m from a minor tributary of Pine Creek.
#20-6-0091	TW IA2 *	Small quartz flake located on a graded section of vehicle track extending along a gently inclined slope approximately 200 m from a tributary of Pine Creek. The track appears to have been relatively recently graded, with excellent visibility and exposure along the track. Despite the high levels of visibility and exposure, no additional artefacts were visible.

AHIMS Site ID	Name	Description
#20-6-0092	TWF IA3 *	Silcrete broken flake located on the edge of a large granite exposure on a gently inclined slope approximately 250 m from a minor tributary of Pine Creek. No further artefacts were identified in the area.
#20-6-0093	TWF IA4 *	Small silcrete flake (with potential use-wear on distal margin) located on the edge of a large granite exposure on a gently inclined slope. This landform trends gradually towards the main channel of Pine Creek.
#20-6-0094	TWF R1 ** (artefact repatriation site)	Artefacts excavated from Spring Creek 1 (AHIMS# 20-6-0083), Pine Creek 1 (AHIMS# 20-6-0086) and Pine Creek 2 (AHIMS# 20-6-0085) during testing were repatriated inside the Development Corridor in an overhang on a rocky crest.
#20-6-0095	TWF R2 **	Artefacts excavated from Pine Creek 3 (AHIMS# 20-6-0084) during testing were repatriated on a granite outcrop close to the testing location, but outside of the Development Corridor.

Note: * Umwelt, November 2023 and ** Lantern, November 2023

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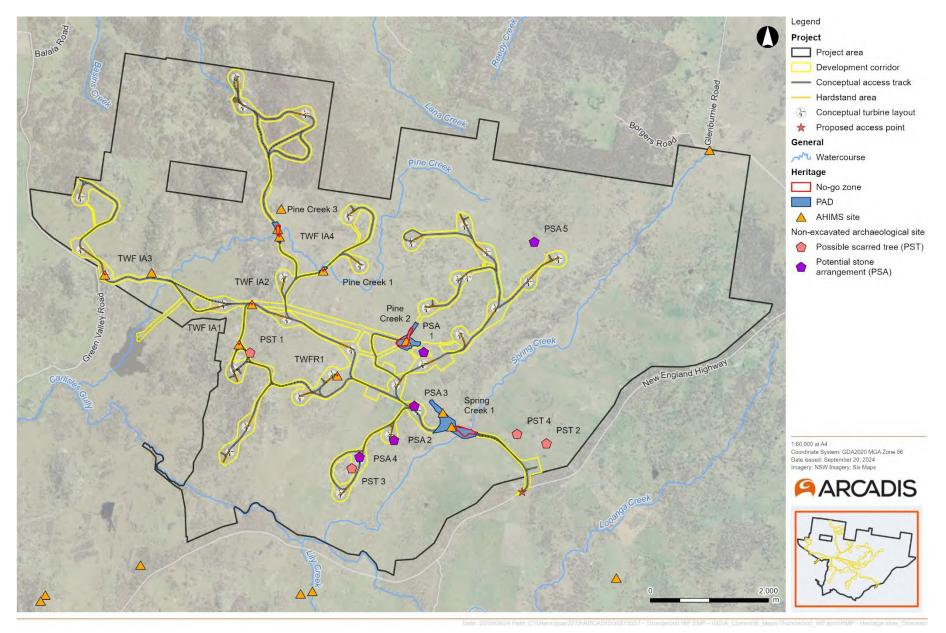


Figure 4-1: Location of recorded sites and areas of archaeological potential

4.3.2 Areas of Archaeological Potential

Four areas of archaeological potential were identified within the Development Corridor, these include Pine Creek 1, Pine Creek 2, Pine Creek 3, and Spring Creek 1 (Figure 4-1). These sites were registered as PADs and reflect the new AHIMS site card information detailed in the Archaeological Report (Lantern, November 2023).

Test pit excavations at these locations uncovered 62 artefacts, predominantly flakes and flaked pieces with one core. As a result of this testing program, and the nature, type, and extent of the subsurface archaeological deposits across the Development Corridor, these deposits are identified as a sparse distribution of stone artefacts across the landscape with small areas of higher density artefact distributions. These areas of higher density reflect short-term occupation by Aboriginal people as they moved through country. In addition, results showed that Spring Creek 1 and Pine Creek 3 are higher density sites with intact archaeological deposits of cultural heritage value that warrant mitigation strategies, to avoid impacts to these values.

Table 4-3 summarised the statement of significance compiled for each of the sites.

Site	Statement of Significance
Pine Creek 1 (AHIMS# 20-6-0086)	 This site is part of a broader complex of sites and associated cultural landscape that is assessed to be of moderate Aboriginal cultural value. It has low significance in terms of social/cultural and aesthetic values. It also has low-moderate scientific value as a site that can contribute to understanding of Aboriginal occupation in the surrounding region.
Pine Creek 2 (AHIMS# 20-6-0085)	 This site is part of a broader complex of sites and associated cultural landscape that is assessed to be of moderate Aboriginal cultural value. It has low significance in terms of social/cultural and aesthetic values. It also has low-moderate scientific value as a site that can contribute to understanding of Aboriginal occupation in the surrounding region.
Pine Creek 3 (AHIMS# 20-6-0084)	 This site is part of a broader complex of sites and associated cultural landscape that is assessed to be of moderate Aboriginal cultural value. It has low significance in terms of social/cultural and aesthetic values. It also has moderate scientific value as a site that can contribute to understanding of Aboriginal occupation in the surrounding region.
Spring Creek 1 (AHIMS# 20-6-0083)	 This site is part of a broader complex of sites and associated cultural landscape that is assessed to be of moderate Aboriginal cultural value. It has low significance in terms of social/cultural and aesthetic values. It also has moderate scientific value as a site that can contribute to understanding of Aboriginal occupation in the surrounding region.

4.4 Non-Aboriginal Cultural Heritage

4.4.1 Non-Aboriginal heritage items

The EIS confirmed that there are no listed heritage items within the Project Area and no potential heritage items were identified during the preparation of the HHA.

Several listed items were identified in the vicinity of the Project and are listed in Table 4-4, none of which will be impacted by the Project. The nearest listed items (the Captain Thunderbolt Sites) are located between approximately 8.5 km and 10 km from the Project Area. Overall, the Project will not have an adverse impact on significant heritage fabric, views to, or the setting of any places of heritage significance, within the Project Area or within the vicinity.

The HHA also considered the potential for impacts to historical archaeology (sub-surface heritage remains) and concluded that due to the land use history, any archaeological remains are likely to be fragmented or previously disturbed. This includes any evidence of goldmining and associated settlement which is known to have occurred throughout the region. Truncated or fragmented remains are unlikely to provide new information about the history of the Project Area, except to confirm that gold mining occurred as indicated by other documented sources. Overall, the Project is unlikely to impact on historical archaeological remains.

Table 4-4: Listed	l Heritade Iten	ns within 15km	of the Project	Area
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Heritage Item	Address	Listing Details	Distance from Project Area
State Heritage Items			
The Captain Thunderbolt Sites - Blanch's Royal Oak Inn	New England Highway URALLA NSW 2358	NSW SHR Item 01889 (Group Listing)	9.5 km
The Captain Thunderbolt Sites - Thunderbolt's Death Site	N/A	NSW SHR Item 01889 (Group Listing)	8.6 km
The Captain Thunderbolt Sites - Thunderbolt's Rock	New England Highway URALLA NSW 2358	NSW SHR Item 01889 (Group Listing)	10 km
Local Heritage Items			
Airlie Station House and Woolshed	Airlie Station Road BENDEMEER NSW 2355	Tamworth LEP 2010 Item I078	9 km
Longford Station	Longford Retreat Road BENDEMEER NSW 2355	Tamworth LEP 2010 Item I095	10 km
Wollun Village Precinct Conservation Area	Wollun Road WOLLUN NSW 2354	Uralla LEP 2012 Item C04	11 km
Balala Station Homestead	Kingstown and Balala Roads BALALA NSW 2358	Uralla LEP 2012 Item I03	11km
Salisbury Court 3031 Thunderbolts Way SALISBURY PLAINS NSW 2358		Uralla LEP 2012 Item I14	12 km

Heritage Item	Address	Listing Details	Distance from Project Area
Yaccamunda	Rocky Gully Road	Tamworth LEP 2010 Item I097	12.5 km
Dangar's Lagoon	Thunderbolts Way (Main Road 73) URALLA NSW 2358	Uralla LEP 2012 Item I54	13.5 km
Haning	Longford Retreat Road BENDEMEER NSW 2355	Tamworth LEP 2010 Item I094	14.5 km

5 ENVIRONMENTAL ASPECTS AND IMPACTS

5.1 Construction Activities

Section 2.3 of the EMS provides an overview of the construction activities that have the potential for environmental impact. The potential risks have been identified based on the outcomes of the risk assessment prepared for the EIS and RtS and which has been summarised in Section 5.2 of the EMS.

The potential environmental aspects and impacts associated with construction are identified in Table 5-1 of the EMS. Key aspects of the Project that could result in impacts to heritage include:

- Clearing of vegetation
- Works around and within watercourses
- Vibration impacts
- General earthworks, resulting in disturbance of soils, consequential erosion and the mobilisation of sediment
- Establishment of ancillary facilities
- Demolition of built structures
- Vehicle movements
- Excavation works
- Drainage works.

5.2 Aboriginal Heritage Impacts

All ground disturbance activities (including vegetation clearance and earthworks for the construction of access tracks, substations, laydown areas and wind turbines) will be located within the bounds of the Development Corridor. Various activities associated with construction and ongoing management of the Project that have potential to result in direct and/or indirect impacts to Aboriginal objects are summarised in Table 5-1.

Action/Works	Impact Type	Notes
Earthworks to construct roads and associated infrastructure	Direct	Earthworks to construct roads, turbine footings and other infrastructure associated with Thunderbolt Wind Farm will have a direct impact on both surface artefacts and subsurface artefacts and subsurface archaeological deposits. If this activity is undertaken within the boundaries of an Aboriginal site, it has the potential to result in direct impact.
Road grading and sealing	Direct	Mechanical grading of unsealed roads or the introduction of materials for road sealing may result in damage (e.g. crushing or surface abrasion) to Aboriginal objects, such as stone artefacts, that are in direct contact with these materials. This will have a direct impact on any artefacts or archaeological deposits within the zone of impacts. This may disturb archaeological material or compress any archaeological deposit that may be in the construction footprint.
	Indirect	Transport of materials may result in indirect impacts if undertaken within the boundaries of an Aboriginal site. Construction of unsealed roads or the sealing of these sections of road may change local hydrology and result in impact deposits that were not previously impacted by rainwater runoff from the unsealed road.

Table 5-1: Potential impacts to Aboriginal sites

Action/Works	Impact Type	Notes
Vegetation management: removal	Direct	The removal of trees and other vegetation for the construction of roads, turbine footings or other infrastructure will have a direct impact on potential archaeological deposits and in situ artefacts. If this activity is undertaken within the boundaries of an Aboriginal site, it has the potential to result in direct impact.
	Indirect	The removal of trees increases the risk of erosion that could impact archaeological deposits and displace Aboriginal artefacts.
Stockpiling materials	Direct	Stockpiling material for construction activity has the potential to contribute to the compression and damage of archaeological material and/or archaeological deposits. If this activity is undertaken within the boundaries of an Aboriginal site, it has the potential to result in direct impact.
Water supply pipeline and pump	N/A	Does not involve tree removal or surface disturbance impacts which may impact sites.

Direct impacts will be avoided where feasible as the Development Corridor allows for micro-siting of associated infrastructure. The potential impacts identified for each Site is described in Table 5-2.

If impacts cannot be avoided, Section 6.2 and Section 6.3 details salvage programs that will be undertaken prior to construction.

Table 5-2: Summary of impact assessment	(SSD 10807896 Appendix 6 Table 2)
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Site number	Type of harm	Degree of harm	Consequence of harm
Spring Creek 1 (AHIMS# 20-6-0083)	Direct and indirect	Partial	Partial loss of value
Pine Creek 1 (AHIMS# 20-6-0086)	Direct and indirect	Partial	Partial loss of value
Pine Creek 2 (AHIMS#20-6-0085)	Direct and indirect	Partial	Partial loss of value
Pine Creek 3 (AHIMS# 20-6-0084)	Direct and indirect	Partial	Partial loss of value
TWF R1 (Artefact Repatriation Site) (AHIMS# 20-6-0094)	Direct and indirect	Partial	Partial loss of value
TWF IA1 (AHIMS #20-6-0090)	Direct and indirect	Partial	Partial loss of value
TWF IA2 (AHIMS #20-6-0091)	Direct and indirect	Partial	Partial loss of value
TWF IA3 (AHIMS #20-6-0092)	Direct and indirect	Partial	Partial loss of value
TWF IA4 (AHIMS #20-6-0093)	Direct and indirect	Partial	Partial loss of value
Potential Stone Arrangement 2	Direct and indirect	Partial	Partial loss of value
Potential Stone Arrangement 3	Direct and indirect	Partial	Partial loss of value
Potential Stone Arrangement 4	Direct and indirect	Partial	Partial loss of value

5.2.1 Aboriginal sites not impacted

Table 5-3 details the Aboriginal Sites identified to outside the Development Corridor. These sites are also shown on Figure 5-1.

Site number	Type of harm	Degree of harm	Distance from Development Corridor
TWF AS1 (AHIMS# 20-6-0089)	Avoid	Outside Development Corridor	18 metres
TWF AS2 (AHIMS# 20-6-0088)	Avoid	Outside Development Corridor	231 metres
TWF AS3 (AHIMS# 20-6-0087)	Avoid	Outside Development Corridor	54 metres
Possible Scarred Tree 1	Avoid	Outside Development Corridor	26 metres
Possible Scarred Tree 2	Avoid	Outside Development Corridor	281 meters
Possible Scarred Tree 3	Avoid	Outside Development Corridor	11 metres
Possible Scarred Tree 4	Avoid	Outside Development Corridor	275 metres
Potential Stone Arrangement 1	Avoid	Outside Development Corridor	60 metres
Potential Stone Arrangement 5	Avoid	Outside Development Corridor	310 metres

Table 5-3: Aboriginal Sites located outside the Development Corridor (SSD 10807896 Appendix 6 Table 1)

Although these sites are unlikely to be impacted by the development, Neoen is committed to ensuring that no direct or indirect harm will impact on these items during construction, operation and decommissioning of the wind farm. For those sites located within 60 metres of the development corridor, no go zones with fencing (or other means) will be installed to demarcate the locations.

5.3 Non-Aboriginal Heritage Impacts

As there have been no Non-Aboriginal heritage items identified within or closely surrounding the Project the likelihood for non-Aboriginal heritage impacts is considered to be low.

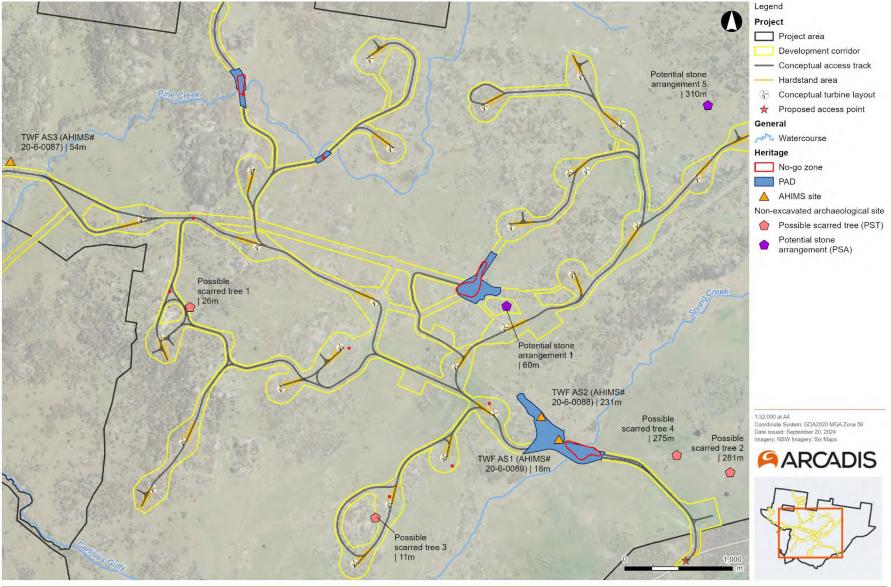
In the unlikely event that unexpected historical archaeological material is discovered, all work in the area will cease and a suitably qualified archaeologist will be consulted to determine an appropriate course of action. The Unexpected Finds Protocol is described in Section 6.5. Depending on the extent and significance of the archaeological remains encountered, consultation with Heritage NSW may also be required prior to the recommencement of works.

5.4 Cumulative impacts

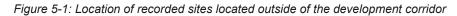
Cumulative heritage impacts may arise from the interplay between construction activities associated with the Project, and other approved or proposed projects that are likely to occur within the area. When considered in isolation, specific impacts may be considered minor. These minor impacts may be more substantial however, when the impact of multiple projects on the broader impact to cultural heritage is considered.

Given that all the identified Aboriginal sites are located within the Project Area, it is unlikely that there will be any cumulative impacts as a result of interaction with other projects being developed in the wider area. Impacts to Aboriginal sites located within the Project Area will be avoided, where possible, through implementation of appropriate mitigation and management measures as outlined in Section 6.

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6 ENVIRONMENTAL MITIGATION AND MANAGEMENT MEASURES

This section identifies the mitigation and management measures to be put in place to minimise potential impacts to heritage.

Mitigation measures include:

- Installation of no-go zones around Aboriginal sites
- Undertaking surface collection and sub-surface salvage excavation in the event that impacts to no-go zones cannot be avoided
- Preparation and implementation of an unexpected find protocol.

Each of these mitigation measures are described in more detail below.

6.1 No-go zones

The Construction Contractor will install no-go zones and fencing (or other means) to demarcate sensitive heritage locations. These sensitive heritage locations are summarised in Table 6-1. The figures are provided in **Appendix C**. A visual summary of the no-go zones is provided in Figure 6-1 and Figure 6-2.

Table 6-1: Locations of no-go zones

Location	Figure
• Spring Creek 1 (AHIMS# 20-6-0083)	Appendix C Figure 1
• Pine Creek 1 (AHIMS# 20-6-0086)	Appendix C Figure 2
• Pine Creek 2 (AHIMS# 20-6-0085)	Appendix C Figure 3
• Pine Creek 3 (AHIMS# 20-6-0084)	Appendix C Figure 4
• TWF R1 (AHIMS# # 20-6-0094) Artefact repatriation site	Appendix C Figure 5
• TWF IA1 (AHIMS #20-6-0090)	Appendix C Figure 6
• TWF IA2 (AHIMS #20-6-0091)	Appendix C Figure 7
• TWF IA3 (AHIMS #20-6-0092)	Appendix C Figure 8
• TWF IA4 (AHIMS #20-6-0093)	Appendix C Figure 9
Potential Stone Arrangements 2	Appendix C Figure 10
Potential Stone Arrangements 3	Appendix C Figure 11
Potential Stone Arrangements 4	Appendix C Figure 12

6.1.1 Process for determining impacts

During the final detailed design stage and prior to construction commencing, the Construction Contractor, in consultation with Neoen, will determine whether the no-go zones can be avoided.

For example, where possible micrositing of access roads will be undertaken to avoid or minimise. As an step, the following is proposed:

The following sites could be avoided or impacts minimised:

• Pine Creek 1 (AHIMS# 20-6-0086): Impacts to this site could be minimised if the access road is microsited. This will be investigated during detailed design.

- TWF IA1 (AHIMS #20-6-0090): Potentially could be avoided if one of the access roads is microsited to avoid the fenced buffer area.
- TWF IA2 (AHIMS #20-6-0091): Potentially could be avoided if the access road is microsited to avoid the fenced buffer area.

The following site are unlikely to be avoided:

- Spring Creek 1 (AHIMS# 20-6-0083): This site is unlikely to be avoided unless both access roads can be appropriately microsited.
- Pine Creek 2 (AHIMS# 20-6-0085): This site is unlikely to be avoided, due to the location of the no-go zone.
- Pine Creek 3 (AHIMS# 20-6-0084): This site is unlikely to be avoided due to the location of the no-go zone extending across the width of the development corridor.
- TWF IA3 (AHIMS #20-6-0092): This site is located within a identified hardstand and is therefore likely to be impacted. There is space for micrositing of the hardstand, but this will need to be agreed based on constructability.
- Potential Stone Arrangement 4: This site could potentially be avoided if it is possible to microsite the hardstand, sufficiently away from the buffer zone. This will need to be agreed based on constructability.

The following site are likely to be avoided:

- TWF R1 (AHIMS# # 20-6-0094) Repatriation site: With the appropriate fencing and buffer zone, the site is located sufficiently far from construction activities to be avoided.
- TWF IA4 (AHIMS #20-6-0093): This site is already avoided by the road, but it is possible some minor micrositing will be required to avoid the fenced buffer zone.
- Potential Stone Arrangement 2: With the appropriate fencing and buffer zone, the site is located sufficiently far from construction activities to be avoided.
- Potential Stone Arrangement 3: With the appropriate fencing and buffer zone, the site is located sufficiently far from construction activities to be avoided.

Where possible, no ground disturbing impacts will be permitted within the 'no-go zones'.

Heritage site that cannot be avoided:

If impacts to these no-go zones cannot be avoided, then a program of surface collection or salvage excavation (Section 6.1 and **Appendix D**), depending on the site, will be undertaken prior to construction. This will be undertaken in consultation with Neoen and the RAPs. If RAPs wish for artefact reburial to take place in a nearby location, the process detailed in Section 6.2.3 will be followed.

For no go zones that cannot be avoided or are partially impacted, the extent of impacts (including correct GPS coordinates) will be recorded on the heritage a tracker or register. A template tracker is provided in **Appendix E.** The Construction Contractor will be required to prepare an Environmental and Safety Work Method Statement (ESWMS) (as described in Section 3.1.3 of the EMS) which will be reviewed and approved by Neoen prior to commencing work. The ESWS will provide more details on the procedure to be followed and the mitigation measure to be put in place during these activities.

Once it is determined which areas can be avoided, a no-go zone will be established which involves a fenced off 10 metre buffer area around each of the heritage locations. Signage will be installed to identify the no-go zone and consequences for trespassing or impacting the area. Fencing will be installed in consultation with, and monitored by, the RAPs prior to construction works commencing. Fencing of the no-go zones by a local Aboriginal fencing company will be considered where possible.

6.2 Salvage collection and excavation

6.2.1 Surface salvage collection

In accordance with NSW CoC B29, prior to carrying out any development that could impact the heritage items identified in Table 2 of Appendix 6 (of the Development Consent), the applicant will salvage and relocate the item/s that will be impacted to a suitable alternative location.

Surface salvage collection works have been identified as being an appropriate mitigation measure for the following sites:

- TWF IA1 (AHIMS #20-6-0090)
- TWF IA2 (AHIMS #20-6-0091)
- TWF IA3 (AHIMS #20-6-0092)
- TWF IA4 (AHIMS #20-6-0093)
- TWF R1 (AHIMS #20-6-0094) Artefact repatriation zone.

The surface salvage program will be undertaken by Neoen, the Archaeologist and RAPs prior to construction commencing. A Surface Salvage and Salvage Excavation procedure is provided in **Appendix D**.

6.2.2 Salvage excavation

As described in Section 4.3, test excavations were conducted by Umwelt in May and October of 2021 at the location of:

- Spring Creek 1 (AHIMS# 20-6-0083)
- Pine Creek 1 (AHIMS# 20-6-0086)
- Pine Creek 2 (AHIMS# 20-6-0085)
- Pine Creek 3 (AHIMS# 20-6-0084).

The Areas of PAD that have been identified at each of these locations, will be fenced off with no-go zones, as detailed in **Appendix C** and Lantern Heritage (2023).

Pine Creek 1 (AHIMS# 20-6-0086) and Pine Creek 2 (AHIMS# 20-6-0085)

While every effort will be made to avoid impacts within the no-go zones at Pine Creek 1 (AHIMS# 20-6-0086) and Pine Creek 2 (AHIMS# 20-6-0085), these sites are low-density artefact scatters of low significance (Lantern Heritage, 2023). As such, they do not warrant salvage excavation. If impacts cannot be avoided, no further mitigation actions are required beyond completion of Site Impact Recording Forms.

Spring Creek 1(AHIMS# 20-6-0083) and/or Pine Creek 3 (AHIMS# 20-6-0084)

If the impacts from the proposed works cannot be avoided at Spring Creek 1(AHIMS# 20-6-0083) and/or Pine Creek 3 (AHIMS# 20-6-0084), then it is recommended that a program of salvage excavation is carried out prior to construction to mitigate harm to cultural heritage values. All salvage excavations will be limited to the footprint of the proposed works, within the identified PAD at those sites.

A Surface Salvage and Salvage Excavation procedure is provided in Appendix D.

6.2.3 Reburial of artefacts

If RAPs wish for artefact reburial to take place in a nearby location, such as repatriation site TWFR1, that process will follow the guidelines laid out in requirement 26 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW, 2010). The place of burial will be agreed in consultation with the archaeologist, RAPs, Neoen and the landholder.

Neoen will pay for the attendance of RAPs and for any materials deemed necessary for the reburial. A full record of the place of reburial will be made, and will include:

- Grid coordinates derived as set out in requirement 8 of the Code of Practice (DECCW, 2010)
- A site plan or mud map referring to permanent features
- Depth of burial, if buried
- Full photographic record of the disposition.

The record will be submitted to AHIMS along with a site card or site card update for the sites in question (Section 7.5.1).

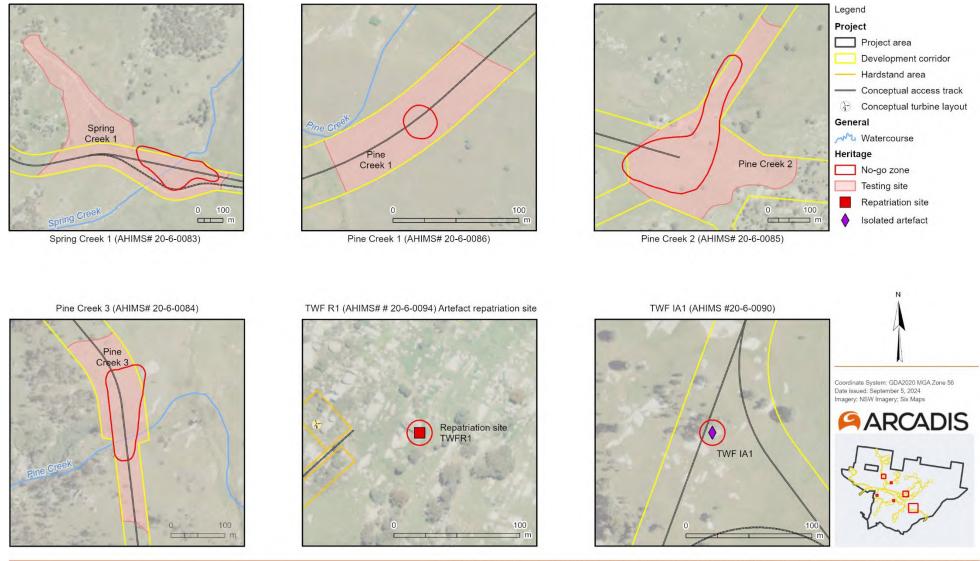
6.3 Impacts outside the Approved Disturbance Area

If impacts occur to heritage items outside of the approved disturbance area, these impacts will be classified as an incident and will be investigated by the Construction Contractor and a nominated RAP representative. The incident report will be prepared by the Construction Contractor, in consultation with the RAP.

The incident will be reported to the Construction Contractor Environmental Advisor, Neoen Project Manager, RAP representative, as well as Heritage NSW (heritagemailbox@environment.nsw.gov.au) and DPHI compliance (compliance@planning.nsw.gov.au). Work in the immediate vicinity will cease immediately and will not re-commence until advice to continue is provided by the Project Archaeologist.

The Environmental Advisor and Neoen Project Manager will notify relevant RAPs of the discovery of Aboriginal items immediately. An appropriate course of action is to be formed in consultation with the RAPs. Where the item is an Aboriginal place or object as defined within the *National Parks and Wildlife Act 1974*, the discovery will be reported to Heritage NSW within 24 hours of becoming aware of the location or discovery of the Aboriginal objects. This reporting will occur in accordance with Section 89A of *the National Parks and Wildlife Act 1974*.

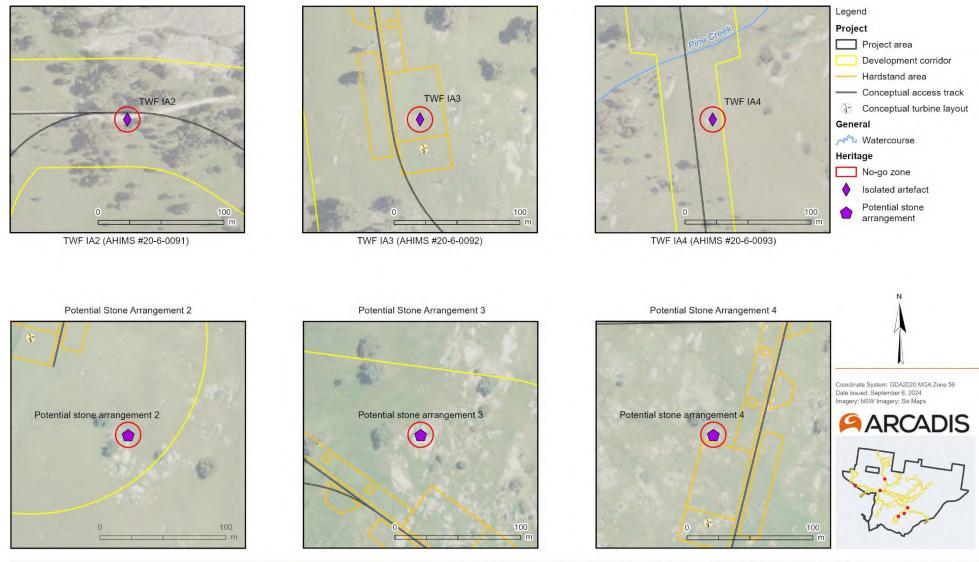
SSD-10807896: Thunderbolt Wind Farm



Date: 5/09/2024 Path: C:\Users\gcaz2278\ARCADIS\30213557 - Thunderbolt WF EMP - GIS\A_Current\8_Maps\Thunderbolt WF aprx\HMP - Heritage sites_Overview_CallOuts_pg1_v4

Figure 6-1: Summary of proposed no-go zones (1 of 2)

SSD-10807896: Thunderbolt Wind Farm



Date: 6/09/2024 Path; C:/Users\gcaz2278\ARCADIS\30213557 - Thunderbolt WF EMP - GIS\A. Current\B. Maps\Thunderbolt_WF aprx\HMP - Heritage sites_Overview_CallOuts_pg2_v

Figure 6-2: Summary of proposed no-go zones (2 of 2)

6.4 Unexpected Finds Protocol

In the event that any heritage items, or potential heritage items are identified during the course of construction, works in the immediate vicinity of the find will cease and the Construction Contractor / Environmental Advisor and nominated RAP representative will be notified.

The following steps will be followed for **Unexpected Finds**:

- 1. All construction that could potentially harm the heritage items will cease (within 10 metre of the find). Only construction that is required to comply with operational and environmental health and safety standards and/or to protect the cultural heritage will occur.
- 2. The Environmental Advisor will be notified immediately; they will then notify the Neoen Project Manager and the nominated RAP representative.
- 3. The Neoen Project Manager will be responsible for notification to Heritage NSW and the NSW Police, <u>immediately</u> after Neoen is made aware of the unexpected find. Neoen will also be responsible for engaging the Project Archaeologist.
- 4. If the item is likely to be a human bone, the skeletal material procedure (Section 6.5) will be followed. Work in the area will cease and not recommence until approval has been granted by Heritage NSW and the NSW Police.
- 5. The Project Archaeologist will be contacted, and if required, a preliminary assessment and recording of the item will be undertaken. The location, context and value of the heritage item will be recorded as determined by the Project Archaeologist.
- 6. Within five days of the heritage items being uncovered, the Project Archaeologist, Environmental Advisor and Neoen Project Manager will facilitate the involvement of any relevant RAPs (if the item is of Aboriginal cultural value) and Heritage NSW to recommend the most appropriate course of action and potential management.
- 7. Where the item is an Aboriginal place or object as defined within the *National Parks and Wildlife Act 1974*, the discovery will be reported to Heritage NSW within a 24 hours of becoming aware of the location or discovery of the Aboriginal items.

Work may recommence within the area of the no-go zone once the Project Archaeologist, in consultation with Heritage NSW and the relevant RAPs, have confirmed that the appropriate protective measures have been undertaken.

6.5 Skeletal Remains

If a burial site, or human remains, are uncovered during works, all relevant procedures for excavation and removal will be undertaken in accordance with:

- Policy Directive Exhumation of Human Remains (NSW Department of Health 2008)
- Skeletal Remains Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977 (NSW Heritage Office 1998)
- Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1997).

Should human skeletal remains be found, they will be handled in accordance with the *Public Health Act* 1991 (NSW).

Management of the remains will be determined through liaison with the appropriate stakeholders (NSW Police Force, forensic anthropologist, Heritage NSW, RAPs, a suitably qualified archaeologist, etc).

The following process will be followed on discovery of **Skeletal Remains**:

- 1. Works are to cease immediately; the remains are not to be touched or interfered with in any way
- 2. Establish an appropriate no go zone around the find of at least 10 m.
- 3. Contact the Environmental Advisor who will notify the police and the Neoen Project Manager.
- 4. The Neoen Project Manager will notify the project archaeologist, RAPs, NSW Police and the Heritage NSW Environment Line on 131 555 <u>immediately</u> after Neoen is made aware of the discovery and provide available details of the remains and their location.
- 5. The police may take control of the site to determine whether the bones are human remains. Where this does not occur, a physical forensic anthropologist will assess the remains, and make a determination of ancestry (Aboriginal or Non-Aboriginal) and antiquity (pre-contact, historic or forensic).
- 6. If the remains are identified as forensic, the area is deemed a crime scene and will be handed over to police control.
- 7. If the remains are considered to be Aboriginal, an <u>Archaeological Management Plan</u> will be prepared and potential management actions will be developed in consultation with the RAPs and Heritage NSW. Implementation of any management action requires prior approval from Heritage NSW.
- If the remains are non-Aboriginal (historical) remains (i.e. a 'relic' under the *Heritage Act 1977*), the site will be secured, and Heritage NSW and RAPs will be notified and an <u>Archaeological Management</u> <u>Plan</u> will be prepared.
- 9. Where human skeletal remains uncovered during project activities are to be removed, this will be undertaken in a sensitive and dignified manner. Approval from NSW Health, under the *Public Health Act 1991* (NSW), will be required prior to removing/exhuming any skeletal remains. Controlled excavation and removal by the site archaeologists and other appropriate specialist forensic anthropologist, RAPs, and NSW Police Force will be undertaken in accordance with relevant guidelines and any requirements of Heritage NSW, DPHI and NSW Health.

6.6 Long term management of Aboriginal heritage items

The long-term management of Aboriginal heritage items will be developed in consultation with the RAPs. Relocation and/or reburial of salvaged items will occur as close to the original find location as possible and individual sites will be buried separately.

The following process will be followed for the long-term management of Aboriginal heritage items:

- As detailed in Section 6.2.3, the relocation site for Aboriginal artefacts will be developed in consultation with the archaeologist, RAPs, Neoen and the landholder. TWFR1 (AHIMS# 20-6-0094) has been identified as a potential repatriation zone. This site is outside the proposed approved development footprint within the Project Area and outside the required buffer zone around any Aboriginal sites not approved for impacts.
- 2. The site/s for relocation of salvaged Aboriginal objects will be noted by submission of site card/s to the Aboriginal Heritage Information Management System (AHIMS), as legally required, within three months of reburial/relocation of the salvaged Aboriginal objects.
- 3. An Aboriginal Site Impact Recording Form (ASIRF) will be completed and submitted to AHIMS following harm for each site collected or destroyed from salvage and/or construction works. Representatives from the RAPs will be provided with the opportunity to assist the Project Archaeologist with the salvage programme and relocation of the salvaged objects.
- 4. If Aboriginal representatives are available to participate in the relocation of the Aboriginal salvaged objects, they will be asked to conduct a ceremony (i.e. smoking) for the relocation site and the relocated artefacts if it is safe to do so in line with any fire safety advice. If representatives from the RAPs are not available to participate and all reasonable opportunities have been afforded, the collection and relocation of Aboriginal objects, will continue as scheduled by the Project Archaeologist.
- 5. Following relocation of the Aboriginal objects, which have been salvaged, the site location/s will also be provided to the Project team, and the Construction Contractor to ensure the site/s are protected during construction, operation and decommissioning of the Project.
- 6. Following relocation of salvaged Aboriginal objects, the mapping within the HMP will be updated to show and/or include the relocation site/s. It is intended that this will occur within 12 months of relocation of the sites.
- 7. A minimum 5 metre buffer zone is required to be placed and delineated around the artefact relocation site/s to ensure they will not be impacted into the future.

6.7 Management Measures

Management actions prescribed by this HMP aim to avoid and minimise impacts on heritage and are summarised in Table 6-1.

Table 6-2: Heritage management and mitigation measures

ID	Measure / Requirement	Timing	Responsibility	Ref	Evidence
HMM1	A heritage management plan (HMP) will be developed for the Project post-approval and will be encompassed within the EMS. The HMP plan will provide details for the ongoing management and maintenance of heritage protection measures during the construction phase of the Project.	Prior to construction	Construction Contractor	EMM36-AH NSW CoC B29	This Plan
HMM2	 All personnel (including sub-contractors) are required to attend a compulsory site induction that includes an environmental component before commencement onsite. The induction will include relevant information regarding management of Aboriginal and non-Aboriginal heritage associated with the Project. 	Prior to construction	Construction Contractor Environmental Advisor	EMM35-AH NSW CoC B29(e)(iv)	Induction
HMM3	 Impacts on identified Aboriginal cultural heritage sites will be minimised where feasible in consultation with a suitably qualified and experienced archaeologist. Measures considered will include (but not be limited to): Works remaining within the Development Corridor Establishment of no-go zones around the following sites: Spring Creek 1 (AHIMS# 20-6-0083) Pine Creek 1 (AHIMS# 20-6-0086) Pine Creek 2 (AHIMS# 20-6-0085) Pine Creek 3 (AHIMS# 20-6-0084) TWF R1 (AHIMS # 20-6-0094) Artefact repatriation site TWF IA1 (AHIMS #20-6-0090) TWF IA2 (AHIMS #20-6-0091) TWF IA3 (AHIMS #20-6-0092) TWF IA4 (AHIMS #20-6-0093) Potential Stone Arrangements 2, 3 and 4 	Prior to and during construction	Project Archaeologist Construction Contractor Environmental Advisor	EMM36-AH NSW CoC B28(b) NSW CoC B29(e)(ii)	This Plan Appendix C No-go fencing and signposting Weekly inspections

ID	Measure / Requirement	Timing	Responsibility	Ref	Evidence
HMM4	An Unexpected Heritage Finds and Human Remains Procedure (refer to Section 6.4) will be prepared in consultation with Heritage NSW. The Procedure will be submitted to the Planning Secretary and be implemented for the duration of Work.	Prior to and during construction	Project Archaeologist Construction Contractor Environmental Advisor	EMM36-AH NSW CoC B29(e)(iii)	Section 6.4 of this Plan Unexpected finds register
HMM5	 Where previously unidentified historic (non-Aboriginal) heritage items or Aboriginal cultural heritage objects are discovered, all work will immediately stop in the vicinity of the affected area and the Unexpected Heritage Finds and Human Remains Procedure (Section 6.5 and Section 6.6) will be implemented. Works potentially affecting the previously unidentified objects will not recommence until Heritage NSW has been informed. If required, the previously unidentified site will be registered in the Aboriginal Heritage Information Management System (AHIMS). 	Prior to and during construction	Project Archaeologist Construction Contractor Environmental Advisor Construction Contractor	EMM36-AH NSW CoC B29(e)(iii)	Section 6.4 of this Plan
HMM6	If human remains are found unexpectedly during the carrying out of Work, NSW Police will be notified immediately and the Unexpected Heritage Finds and Human Remains Procedure shall be implemented.	Prior to and during construction	Project Archaeologist Construction Contractor Environmental Advisor Construction Contractor	EMM36-AH NSW CoC B29(e)(iii)	Section 6.4 of this Plan
HMM7	 Salvage collection of surface artefacts will be carried out for the following sites if no-go zones are unsuccessful: TWF IA1 (AHIMS #20-6-0090) TWF IA2 (AHIMS #20-6-0091) TWF IA3 (AHIMS #20-6-0092) TWF IA4 (AHIMS #20-6-0093) 	Prior to construction	Neoen Project Archaeologist Construction Contractor Environmental Advisor Construction Contractor	EMM36-AH NSW CoC B28(c) NSW CoC B29(e)(ii)	Salvage report
HMM8	 Sub-surface salvage excavation will be carried out for the following sites if the use of no-go zones is deemed to be ineffective for the following sites: Spring Creek 1 (AHIMS# 20-6-0083) Pine Creek-3 (AHIMS# 20-6-0084) 	Prior to construction	Neoen Project Archaeologist Construction Contractor Environmental Advisor Construction Contractor	EMM36-AH NSW CoC B28(c) NSW CoC B29(e)(ii)	Salvage report

ID	Measure / Requirement	Timing	Responsibility	Ref	Evidence
HMM9	Exclusion fencing (Section 6.1) for no-go zones shall be implemented for heritage sites.	Prior to and during construction	Construction Contractor Project Archaeologist	EMM36-AH NSW CoC B29(e)(i)	Sensitive Area Plans
HMM10	Any impacts to heritage items outside of the disturbance area will be managed in accordance with the protocol outlined in Section 6.3.	Prior to and during construction	Neoen Project Archaeologist Construction Contractor Environmental Advisor	EMM36-AH NSW CoC B29(e)(iii)	Section 6.3 of this Plan
HMM11	Ongoing consultation will occur with Aboriginal stakeholders on a six- monthly basis.	Prior to and during construction	Neoen Construction Contractor Environmental Advisor	NSW CoC B29(e)(v)	Consultation register
HMM12	Ongoing monitoring and review of the effectiveness of this plan will occur to determine its effectiveness in managing heritage impacts.	Ongoing	Construction Contractor Environmental Advisor	NSW CoC B29(f)	This Plan
HMM13	During construction, in the unlikely event that unexpected historical archaeological material is discovered, all work in the area will cease and a suitably qualified archaeologist consulted to determine an appropriate course of action. Depending on the extent and significance of the archaeological remains encountered, consultation with Heritage NSW may also be required prior to the commencement of works.	Prior to and during construction	Neoen Project Archaeologist Construction Contractor Environmental Advisor	EMM39-HH	Unexpected Finds Protocol (Section 6.4)

7 COMPLIANCE MANAGEMENT

7.1 Roles and Responsibilities

The Project organisational structure and overall roles and environmental responsibilities are outlined in Section 3.2 of the EMS. Specific responsibilities for the implementation of heritage management are detailed in Section 6 of this HMP.

7.1.1 Neoen Project Manager

Neoen will be responsible for all activities related to the management of Aboriginal Heritage. This includes:

- Managing the potential impacts to no-go zones which cannot be avoided and overseeing a program of surface collection or salvage excavation (depending on the site) which will be undertaken prior to construction within those zones
- The Neoen Project Manager will be responsible for notification to Heritage NSW and the NSW Police, <u>immediately</u> after Neoen is made aware of the unexpected find, skeletal find or reportable incident.
- Responsible for engaging the Project Archaeologist
- Ensuring that the necessary repatriations and excavations are undertaking in consultation with the RAPs
- Investigation of incidents relating to impacts to heritage items
- Ongoing consultation with the RAPs throughout construction.

7.1.2 Project Archaeologist

A Project Archaeologist will be engaged to provide advice throughout construction and to supervise implementation of processes and management measures for culturally sensitive areas. These activities will include, but not limited to:

- Management of no-go zones around TFW R1 (AHIMS #20-6-0094), Spring Creek 1 (AHIMS# 20-6-0083) and Pine Creek 3 (AHIMS# 20-6-0084)
- Implementation of the unexpected heritage finds protocol.
- Providing advice for any damage to heritage items outside the approved disturbance area.

The Project Archaeologist will demonstrate that they hold appropriate qualifications and all licenses relevant to the work being undertaken, in addition to specific experience in working in environmentally sensitive areas of a similar nature to the Project.

7.1.3 Construction Contractor Environmental Advisor

The Construction Contractor Environmental Advisor will be responsible for the following:

- Notification to the Neoen Project Management immediately after being made aware of unexpected finds, skeletal fines and incidents
- Undertaking site environmental inspection and inspections of oo-go zones and restricted areas
- Ensuring that impacts to Heritage items are minimised where feasible during construction
- Providing the relevant inductions relating to Heritage impacts to all sub-contractors and visitors to site.

7.1.4 Construction Contractor

The Construction Contractor will be responsible for day-to-day management of activities during construction, and specifically:

- Notification to the Construction Contractor environmental Advisor after being made aware of unexpected finds, skeletal fines and incidents
- Installation of the no-go zones and fencing (or other means) to demarcate sensitive area
- Investigation of incidents relating to impacts to heritage items
- Ensuring that impacts to Heritage items are minimised where feasible during construction
- Providing the relevant inductions relating to Heritage impacts to all sub-contractors and visitors to site.

7.1.5 Relationship between Construction Contractor and Neoen

An on-site Owner's Engineer (OE) who represents Neoen, will be responsible for undertaking weekly site meetings. The Construction Contractor is also required to provide weekly and monthly reports to OE and Neoen. This will include:

- Regular compliance reporting and regular internal environmental audits will be undertaken. This will
 include assessment of compliance with the HMP. High risk areas will be specifically checked during these
 internal audits
- The Construction Contractor will provide an ESWMS to Neoen prior to commencing work within or near no-go zones (Section 6.1.1)

Management of the Construction Contractor and their compliance with the HMP will be monitored and reviewed through the procedures described in in the HMP.

7.2 Training

All site personnel (including sub-Construction Contractors) will undergo site induction training relating to heritage management issues prior to construction commencing. The induction training will address elements related to heritage management, including:

- Existence and requirements of this HMP
- Relevant legislation, regulations and Environment Protection Licence (EPL) conditions
- Incident response, management and reporting
- Environmentally sensitive locations and no-go zones
- Unexpected finds protocol for heritage items
- All requirements of the Appendices contained within this HMP.

As required by NSW CoC B29(e)(iv), a register will be kept and updated to record employees who have completed the heritage induction and their date of completion.

Targeted training in the form of toolbox talks or specific training will also be provided to personnel with a key role in heritage management or those undertaking an activity with a high risk of environmental impact. Site personnel will undergo refresher training at not less than six monthly intervals.

Daily pre-start meetings conducted by the Construction Contractor Site Supervisor will inform the site workforce of any environmental issues relevant to heritage that could potentially be impacted by, or impact on, the day's activities.

Further details regarding staff induction and training are provided in Section 3.3 of the EMS.

7.3 Monitoring and Inspections

Inspections of sensitive areas and activities with the potential to impact heritage will occur for the duration of the project. Requirements and responsibilities in relation to monitoring and inspections are documented in Section 7.1 of the EMS.

Table 7-1: Monitoring and inspections relevant to heritage management

Inspection Type	Frequency	Focus	Responsibility	Record
Site environmental inspection	Weekly	Work next to or within cultural heritage sensitive areas	Construction Contractor Environmental Advisor Construction Contractor Site Supervisor	Inspection checklist
No-go zones and restricted areas	Weekly	No-go zones and fencing or other means to protect cultural heritage sites	Construction Contractor Environmental Advisor Construction Contractor Site Supervisor	Inspection checklist

7.4 Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of environmental controls, compliance with this HMP, State CoC and Commonwealth CoA (if relevant) and other relevant approvals, licenses and guidelines.

Audit requirements are detailed in Section 7.2 of the EMS.

7.5 Reporting and Identified Records

Reporting requirements and responsibilities are documented in Section 7.3 of the EMS.

Specific reporting requirements associated with the HMP are outlined in Table 7-1.

Table 7-2: Reporting requirements relevant to heritage management

Report	Frequency	Responsibility
Salvage excavation report (Appendix D Section 1.6)	Within 12 months of completing the heritage related work described in the environmental assessment documents.	Project Archaeologist Environmental Advisor Neoen Project Manager
Unexpected Heritage Item Recording Form (Section 6.4)	Within 24 hours of encounter with an unexpected heritage item	Project Archaeologist Environmental Advisor
Notification to Heritage NSW (Section 6.4)	Immediately Following encounter with an unexpected heritage item	Project Archaeologist Environmental Advisor Neoen Project Manager
Registration of unexpected Aboriginal heritage finds in the AHIMS	Within seven days of encounter with unexpected aboriginal heritage item	Project Archaeologist
Notification to NSW Police (Section 6.4)	Immediately after encounter with human remains	Project Archaeologist Environmental Advisor Neoen Project Manager

The Construction Contractor will be required to maintain accurate records substantiating all construction activities associated with the Project or relevant to the State CoC and Commonwealth CoA, including

measures taken to implement this HMP. Records will be made available to the DPHI and DCCEEW (NSW and Commonwealth) upon request, within a reasonable timeframe nominated in the request.

7.5.1 Registration of Aboriginal heritage finds in the AHIMS

If a new Aboriginal site is found in New South Wales it will be recorded in the Aboriginal Heritage Information Management System (AHIMS). There are two ways to record Aboriginal sites:

https://www2.environment.nsw.gov.au/topics/heritage/search-heritage-databases/aboriginal-heritage-information-management-system

- Mobile phone app: The app was developed to make site recording easy, consistent, and more
 accurate. When using the mobile app to record site information, a site card will automatically be
 generated with the site details entered.
- **Desktop platform:** an Aboriginal site impact recording form for a site impacted as part of archaeological investigation and authorised impacts under an Aboriginal heritage impact permit can also be submitted via the platform.

7.6 Incident Management

Incidents are occurrences that cause or threaten to cause material harm, where material harm is defined as:

- Harm that involves *actual or potential harm* to the health or safety of human beings or to the environment that is not trivial, or
- Harm that results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that will be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment), or
- Have the potential to, or do, impact on one or more protected matter(s) other than as authorised by the Commonwealth Approval (EPBC Number: 2021/9048), or
- A pollution incident as detailed in Part 5.7 of the POEO Act.

7.6.1 Incident Response

All incidents will be managed in accordance with Figure 7-1. The Construction Contractor will determine the need to notify based on the severity of the impact and the risk of offsite impacts.



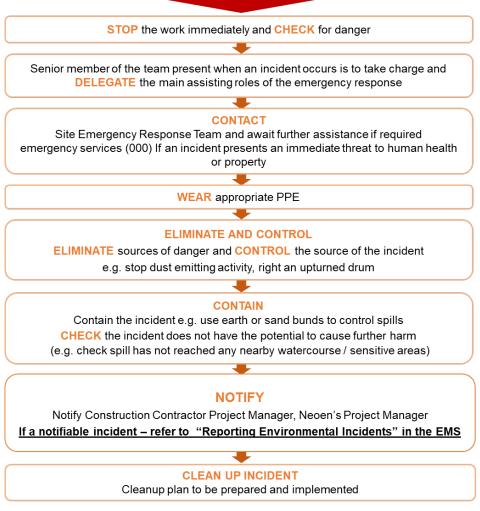


Figure 7-1: Overview of incident response

7.6.2 Reporting Environmental Incidents

All potential incidents will be advised verbally <u>immediately</u> to Neoen's Project Manager. The procedures for notifications to DPHI and EPA are provided below and summarised in Figure 7-2. A summary of notification requirements is provided below.

7.6.2.1 DPHI notification

As required under NSW CoC C10 and Appendix 8 of the Development Consent, the Planning Secretary will be notified via the Major Projects website <u>immediately</u> after Neoen becomes aware of a notifiable incident. The notification will:

- Identify the development, including the development application number and the name of the development
- Set out the location and nature of the incident.

Neoen (or the Construction Contractor as delegate) will provide the subsequent notification of the incident and reports will be submitted in accordance with the requirements set out in Appendix 8 of the Development Consent. This process is also summarised below.

Notification Report

A written incident notification will be submitted to DPHI via the Major Projects website within <u>seven days</u> after Neoen becomes aware of an incident. The written notification will:

- Identify the development and application number
- Provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident)
- Identify how the incident was detected
- Identify when the Proponent became aware of the incident
- Identify any actual or potential non-compliance with conditions of consent
- Describe what immediate steps were taken in relation to the incident
- Identify further action that will be taken in relation to the incident
- Identify a Project contact for further communication regarding the incident.

<u>Within 30 days</u> of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, Neoen or the Construction Contractor will provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements, and such further reports as may be requested.

The Incident Report will include:

- A summary of the incident
- Outcomes of an incident investigation, including identification of the cause of the incident
- Details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence
- Details of any communication with other stakeholders regarding the incident.

7.6.2.2 Agency notification under the POEO Act

The relevant authorities that will be notified for a material harm pollution incident are listed in Table 7-3. It is important to note the order of notification and phone numbers to use can vary depending on the nature of the pollution incident.

All of the authorities listed (whether considered relevant or not) will be contacted for each Material Harm pollution incident to satisfy POEO Act requirements. Penalties apply to both individuals and corporations for failing to notify material harm pollution incidents:

- Maximum penalty for individuals \$500,000
- Maximum penalty for corporations \$2,000,000.

Table 7-3: Authorities to notify for Material Harm pollution incidents

Authority	Contact Number	Responsibility
Fire and Rescue NSW	000 (emergency)	Construction Contractor
	1300 729 579	
NSW EPA environment line	131 555	Construction Contractor
Ministry of Health (via the local Public Health Unit)	Contact 1300 066 055 to be directed to the local Public Health Unit, or visit the NSW Health Website	Construction Contractor
SafeWork NSW	131 050	Construction Contractor
Tamworth Regional Council	(02) 6778 6300	Construction Contractor
Uralla Shire Council	(02) 6767 5555 or 1300 733 625	Construction Contractor
DPHI	Via the Major Projects Portal or	Neoen Project Manager
	(02) 9995 6038 / 0427 749 597	

POEO Act Notification Report

Section 150 of the POEO Act provides the information that needs to be notified, being:

- The time, date, nature, duration and location of the incident
- The location of the place where pollution is occurring or is likely to occur and the nature, the estimated quantity or volume and the concentration of any pollutants involved, if known
- The circumstances in which the incident occurred (including the cause of the incident, if known)
- The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known
- Other information prescribed by the regulations.

Only known information will be provided when notifying of a material harm pollution incident. If further information becomes known after the initial notification, that information will immediately be notified to all authorities in accordance with Section 150 of the POEO Act. The immediate verbal notification will be followed by written notification to each relevant authority within <u>seven days</u> of the date on which the incident occurred.

Complying with these notification requirements does not remove the need to comply with any other legislative requirements for incident notification (e.g., requirements under the conditions of an EPL or the *Work Health and Safety Act 2011*).

7.6.3 Incident Investigation and Corrective Action

Investigations on any incidents will be conducted, and action plans established, to ensure that the incident does not occur again. An environmental investigation report will include:

Environmental Investigation Report

An environmental investigation report will include:

- A summary of the incident
- Identification of the cause, extent and responsibility of the incident
- Details of the corrective and preventative actions that have been, or will be, implemented to address the incident
 and prevent recurrence
- Identification of the personnel responsible for carrying out the corrective action
- Implementation or modification of controls necessary to avoid a repeat occurrence of the incident
- Recording of any changes in written procedures required.

Where there are lessons learnt from the investigation, or current procedures are identified as being ineffective, the EMS and relevant management plan will be revised by the Construction Contractor Environmental Advisor to include the improved procedures or requirement.

Corrective actions will be reported back to DPHI, EPA, Neoen and Construction Contractor Project Manager. In addition, upon the completion of the investigation, the findings and recommendations will be distributed to the relevant work groups for discussion at a toolbox meeting (refer to Section 3.3 of the EMS).

An overview of the incident identification and notification process is provided in Figure 7-2.

7.6.4 Recording Incidents

All incidents (both notifiable and non-notifiable) and non-compliances will be recorded and maintained within the Complaints and Incident Management Database. The database will also include details of any corrective actions, lessons learnt and close out of the incident or complaint.

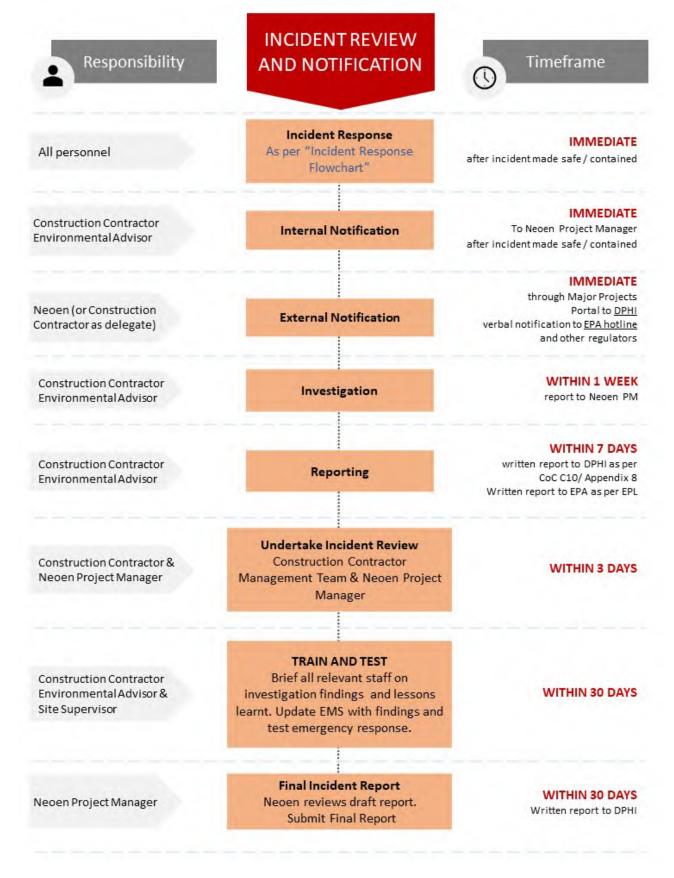


Figure 7-2: Overview of incident investigation and reporting

7.7 Non-Compliances and Corrective Actions

7.7.1 Non-compliances

A non-compliance is an occurrence, set of circumstances or development that is a <u>breach</u> of any EPBC CoA, NSW CoC, EMM, licence condition (where applicable), permit or any other statutory approval relevant to the activity and/or area where the activity occurs, and which triggers a specific statutory requirement to notify a regulatory authority. This will also include any material non-compliance against the EMS and other plans strategies and monitoring programs required by the NSW CoCs.

Potential non-compliances can be identified by anyone and will be reported to the Construction Contractor's Environmental Advisor as a potential non-compliance. Whether the DPHI needs to be notified will be determined in consultation with Neoen Project Manager.

The Construction Contractor's Environmental Advisor is responsible for maintaining compliance records as current at the point of use. The Construction Contractor will provide Neoen with a copy of all compliance records. Neoen is required to maintain accurate and complete compliance records.

Any non-compliance will be managed as an incident in accordance with the process described in Section 7.6 and Figure 7-1.

7.7.1.1 DPHI Non-compliance Notification

The Planning Secretary will be notified via the Major Projects website within seven days after Neoen becomes aware of any non-compliance (NSW CoC C11). The notification will:

- Identify the development (including the application number)
- Set out the condition/s that is non-compliant
- The nature of the breach
- The reason for the non-compliance (if known)
- What actions have been, or will be, undertaken to address the non-compliance.

NOTE: NSW CoC C13 states that a non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

7.7.1.2 EPA Non-compliance Notification and Reporting

As discussed in Section 7.6.2.2, the EPA will be notified of any pollution incident that represents a threat or potential threat of material environmental harm or harm to human health.

Under the EPL, an annual compliance statement detailing compliance with licence conditions over the previous reporting period is required. Annual returns are legally binding statements and can be lodged online via eConnect EPA. The annual compliance statement will include any non-compliances.

For non-compliances with the potential to result in environmental harm, the EPA may decide to issue a penalty notice or consider taking prosecution action. In order to drive environmental improvements, licensees may also be required to undertake a pollution reduction program. Where the non-compliance is minor, the EPA may choose to issue a formal warning.

7.7.2 Corrective Actions

Corrective actions raised in relation to incidents and near misses will be entered, tracked and closed out through the Complaints and Incident Management Database.

All non-compliances and corrective actions, irrespective of type, will be entered into the Corrective Action Register, tracked and closed out and will be reported to the Construction Contractor Site Manager and Neoen Project Manager.

7.8 Complaints

Complaints will be managed as soon as possible in accordance with the requirements of the Community Communication Strategy (CCS) and Complaints Management System developed in accordance with NSW CoC B7 and NSW CoC B8 respectively.

Section 3.5.4 of the EMS details the process managing and responding to complaints.

7.9 Disputes

Should a complaint not be able to be resolved between a complainant (which could include any stakeholders or local community) or a dispute about the implementation of any measures, then either party may refer the matter to the Planning Secretary for resolution.

8 REVIEW AND IMPROVEMENT

8.1 Continuous Improvement

Continuous improvement of this Plan will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets for the purpose of identifying opportunities for improvement. The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of environmental management and performance
- Determine the cause or causes of non-compliances and deficiencies
- Develop and implement a plan of corrective and preventative action to address any non- compliances and deficiencies
- Verify the effectiveness of the corrective and preventative actions
- Document any changes in procedures resulting from process improvement
- Make comparisons with objectives and targets.

Project environmental risks will be identified and included in the risk register and appropriate mitigation measures implemented throughout the construction of the Project as part of the continuous improvement process.

The process for ongoing risk identification and management during construction is outlined in Section 5.2 of the EMS.

8.2 HMP Update and Amendment

The processes described in Section 7.4 of the EMS may result in the need to update or revise this Plan. This will occur as needed.

The RAPs will be consulted with regarding any future updates or amendments to the HMP.

Any revisions to the HMP will be approved in accordance with the process outlined in Section 1.5 of the EMS.

A copy of the updated Plan and changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure.

APPENDIX A DPHI Consultant Endorsement



Aaron Gutteridge Development Manager Neoen Australia Pty Ltd Level 21, 570 George Street Sydney NSW 2000

14/06/2024

Subject: Thunderbolt Wind Farm – Appointment of heritage expert

Dear Mr Gutteridge,

Reference is made to your post approval matter, SSD-10807896-PA-1, requesting the Secretary's endorsement of a suitably qualified and experienced person to prepare the Heritage Management Plan for the Thunderbolt Wind Farm as required by Schedule 2, Condition B29(a).

The Department has reviewed the nominations and information you have provided and is satisfied that the proposed experts are suitably qualified and experienced. Accordingly, I can advise that the Planning Secretary endorses the appointment of Rebecca Parkes and Conor McAdams from Lantern Heritage Pty Ltd to prepare the Heritage Management Plan.

Please ensure this correspondence is appended to the Heritage Management Plan.

If you wish to discuss the matter further, please contact Katie Weekes on (02)4927 3223 or via email at <u>katie.weekes@dpie.nsw.gov.au</u>.

Yours sincerely

Nicole Brewer Director Energy Assessments

As nominee of the Planning Secretary

APPENDIX B Consultation



Alexis Good Project Manager Neoen Australia Pty Ltd Level 6, 16 Marcus Clarke Street Canberra ACT 2601

31/07/2024

Subject: Thunderbolt Wind Farm – Request for Staging of Management Plans

Dear Ms. Good,

I refer to your request dated 30 July 2024 seeking the Planning Secretary's approval to revise the staging in accordance with the Development Consent for the Thunderbolt Wind Farm (SSD-10807896).

The Department has reviewed your proposal to develop the project in three stages comprising:

- Stage 1: Construction of the Thunderbolt Wind Farm.
- Stage 2: Operation of the Thunderbolt Wind Farm.
- Stage 3. Decommissioning of the Thunderbolt Wind Farm at end of life.

This staging applies to the following strategies and plans:

- Biodiversity Management Plan (Condition B25).
- Heritage Management Plan (Condition B29).
- Traffic Management Plan (Condition B34).
- Emergency Plan (Condition B42).
- Environmental Management Strategy (Condition C1).

Neoen intends to further stage the Traffic Management Plan as follows:

- Stage 1a: Construction of the Thunderbolt Wind Farm Project access point off the New England Highway.
- Stage 1b: Commence construction of the wind farm and construction of the balance of the road upgrades detailed in Table 7-2 of Appendix 7 of the Development Consent.
- Stage 1c: Continue construction of the wind farm and the transport of over-size over-mass (OSOM) vehicles.

The Department notes that:

- Neoen has committed to supporting each of the above stages with relevant strategies, plans and programs.
- Transport for NSW has raised no objections to staging.
- Neoen has committed to meet obligations, including consultation with stakeholders, prior to each respective stage of the development.

Accordingly, in accordance with Schedule 2, Condition 3 of the Development Consent, as nominee of the Planning Secretary, I approved the staging strategy for Thunderbolt Wind Farm.

If you wish to discuss the matter further, please contact Katie Weekes on (02) 49273223 or via email at katie.weekes@dpie.nsw.gov.au.

Yours sincerely

Nicole Brewer Director Energy Assessments

As nominee of the Planning Secretary

Table B1: Overview of consultation undertaken on the HMP

Agency	Date	Person Contacted	Comment
Heritage NSW	23/05/2024	Heritage NSW email heritagemailbox@environment.nsw.gov.au	Email introducing the Project
	23/05/2024	Eva Day support@zendesk.environment.nsw.gov.au	Notification of receipt and request to submit information to the Major Projects Portal
	29/07/2024	Nicole Davis, Manager Assessments, Heritage NSW	Comments on the draft HMP
DPHI	12/05/2024	Major Project Portal post approval submission	Request for endorsement of Heritage Specialists
	14/06/2024	Nicole Brewer, Director Energy Assessments	Endorsement of Rebecca Parkes and Conor McAdams as suitably qualified Heritage Specialists
Nunawanna Aboriginal Corporation	12/06/2024	Colin Ahoy Larissa Ahoy	Email introducing the Project and Draft HMP issued to RAPs for review
	13/06/2024	Colin Ahoy Larissa Ahoy	Confirming interest in the Project and review of the HMP
	16/07/2024	Larissa Ahoy	Face to face meeting to discuss the Project and HMP
	31/07/2024	Colin Ahoy Larissa Ahoy	Follow-up on progress of the HMP review
	02/08/2024	Colin Ahoy	Comments received on the HMP
	14/08/2024	Colin Ahoy	Reissued the updated HMP based on comments received
Iwatta Aboriginal Corporation	12/06/2024	Steve Ahoy	Email introducing the Project and Draft HMP issued to RAPs for review
	17/06/2024	Steve Ahoy	Confirming interest in the Project
	16/07/2024	Steve Ahoy	Face to face meeting to discuss the Project and HMP
	31/07/2024	Steve Ahoy	Follow-up on progress of the HMP review
	05/08/2024	Steve Ahoy	Comments received on the HMP

SSD-10807896: Thunderbolt Wind Farm

Agency	Date	Person Contacted	Comment
Nyakka Aboriginal Corporation's	12/06/2024	Rhonda Kitchner	Email introducing the Project and Draft HMP issued to RAPs for review
	16/07/2024	Rhonda Kitchner	Face to face meeting to discuss the Project and HMP
	31/07/2024	Rhonda Kitchner	Follow-up on progress of the HMP review
	05/08/2024	Rhonda Kitchner	Comments received on the HMP
	14/08/2024	Rhonda Kitchner	Reissued the updated HMP based on comments received
Gomeroi People NT Claimants	12/06/2024	Rose Nean Brian Draper	Email introducing the Project and Draft HMP issued to RAPs for review
	13/06/2024	Rose Nean	Confirming interest in the Project and review of the HMP
	15/07/2024	Rose Nean	Face to face meeting to discuss the Project and HMP
	31/07/2024	Rose Nean Brian Draper	Follow-up on progress of the HMP review
	14/08/2024	Rose Nean Brian Draper	Reissued the updated HMP based on comments received
Armidale LALC	25/03/2024	Hazel Vale Mavis Ahoy LALC Board members	Face to face meeting to discuss the project and provide an update
	24/06/2024	LALC Board members	Email introducing the Project and Draft HMP issued to RAPs for review
	16/07/2024	Hazel Vale	Face to face meeting to discuss the Project and HMP
	31/07/2024	LALC Board members	Follow-up on progress of the HMP review
Bing Binni Traditional Owner	12/06/2024	Bruce Cohen	Email introducing the Project and Draft HMP issued to RAPs for review
	17/07/2024	Bruce Cohen	Face to face meeting to discuss the Project and HMP
	31/07/2024	Bruce Cohen	Follow-up on progress of the HMP review

SSD-10807896: Thunderbolt Wind Farm

Agency	Date	Person Contacted	Comment
AT Gomilaroi Cultural Consultancy	12/06/2024	Aaron Talbott	Email introducing the Project and Draft HMP issued to RAPs for review
	17/06/2024	Aaron Talbott	Confirming interest in the Project
	31/07/2024	Aaron Talbott	Follow-up on progress of the HMP review
Ngoorumbah Tingha Elders Council Aboriginal Corporation	12/06/2024	Leonard Blair	Email introducing the Project and Draft HMP issued to RAPs for review
	31/07/2024	Leonard Blair	Follow-up on progress of the HMP review
Didge Ngunawal Clan (DNC)	12/06/2024	Lilly Carroll	Email introducing the Project and Draft HMP issued to RAPs for review
	31/07/2024	Lilly Carroll	Follow-up on progress of the HMP review
Gunjeewong Cultural Heritage Corporation	12/06/2024	Cherie Turrise	Email introducing the Project and Draft HMP issued to RAPs for review
	31/07/2024	Cherie Turrise	Follow-up on progress of the HMP review
Corroboree Aboriginal Corporation	12/06/2024	Marilyn Carroll-Johnson	Email introducing the Project and Draft HMP issued to RAPs for review
	31/07/2024	Marilyn Carroll-Johnson	Follow-up on progress of the HMP review
Natasha Rodgers	12/06/2024	Natasha Rodgers	Email introducing the Project and Draft HMP issued to RAPs for review
	13/06/2024	Natasha Rodgers	Confirming interest in the Project and review of the HMP
	31/07/2024	Natasha Rodgers	Follow-up on progress of the HMP review

Department of Climate Change, Energy, the Environment and Water



Our ref: DOC24/499119Your ref: SSD-10807896-PA-5Alexis GoodNeoen Australiaalexis.good@neoen.comLetter uploaded to the Major Projects Planning PortalHeritage Management Plan – State Significant DevelopmentProposal: Thunderbolt Wind FarmMajor Project reference: SSD-10807896Received: 26 June 2024

Dear Alexis

Thank you for your referral seeking advice on the Heritage Management Plan (HMP) dated 26 June 2024 for the above State Significant Development. Thank you for the continued opportunity to comment on the project.

Unfortunately, the HMP provided to Heritage NSW does not include comments from the Registered Aboriginal Parties (RAPs). Once the HMP has been updated to include RAP comments and addressed any comments raised, then the plan can be resubmitted to Heritage NSW for further comment.

Based on a preliminary review of the Draft HMP, Heritage NSW generally supports the recommendations and management strategies outlined in the HMP, however additional information and modifications are required, including:

- 1. While consultation with the RAPs is generally mentioned in the HMP a specific procedure for ongoing consultation is required. This must include a commitment to consultation on 6 monthly basis in order to demonstrate ongoing consultation. It also must include timeframes for notification of fieldwork and review of salvage reports and HMP updates. Section 8.2 must include the need for RAP consultation to be undertaken for any HMP update or amendment
- 2. Please update either the title or contents of Table 5-1 'Potential Impacts to Aboriginal sites and proposed mitigations' as it doesn't include any proposed mitigation measures.
- 3. Section 6.1 'No-go zones' needs to be updated to include the requirement for exclusion fencing of no-go zones to occur prior to any construction works. The procedure for determining the position of exclusion fencing on the ground during installation also needs to be included, for example participation of RAPs and an archaeologist.

- 4. Please update Section 6.3 'Impacts outside the approved disturbance area'. Section 89A of the National Parks and Wildlife to Act 1974 refers to the requirement to provide the details of any known Aboriginal site to AHIMS, it does not address impacts to those objects. In the event of potential unapproved impacts to Aboriginal objects, works in the area must stop and the potential impact must be reported to Heritage NSW and DPHI compliance (heritagemailbox@evironment.nsw.gov.au and compliance@planning.nsw.gov.au).
- 5. Please update Section 6.4 'Unexpected finds protocol' and Section 6.5 'Skeletal remains'. Any management actions must be developed in consultation with RAPs and Heritage NSW. Implementation of management actions requires authorisation from Heritage NSW
- 6. Section 6.6 needs to include the strategy for long term management of Aboriginal heritage items established with the RAPs as per Condition B29 (e)(ii).
- 7. Appendix C does not include a methodology for the surface salvage of objects please include a methodology for the collection of surface aboriginal objects in accordance with the approval.
- 8. Please update Appendix D Section 1.3 'Discovery of non aboriginal archaeological relics', Heritage NSW should be notified rather than the Heritage Council of NSW.

Following revision of the Heritage Management Plan to address the above comments, please resubmit the Plan to Heritage NSW for comment.

If you have any questions regarding these comments, please contact Alison Lamond, Senior Assessments Officer, at Heritage NSW on 9873 8500 or heritagemailbox@evironment.nsw.gov.au.

Yours sincerely

Nicole Davis

Nicole Davis Manager Assessments Heritage NSW Department of Climate Change, Energy, the Environment and Water As Delegate under *National Parks and Wildlife Act 1974* 29 July 2024

Table B2: Response to Heritage NSW comments

Section of comment	Comment	Neoen Response	Section Amended
Section 8.2	While consultation with the RAPs is generally mentioned in the HMP a specific procedure for ongoing consultation is required. This must include a commitment to consultation on 6 monthly basis in order to demonstrate ongoing consultation. It also must include timeframes for notification of fieldwork and review of salvage reports and HMP updates. Section 8.2 must include the need for RAP consultation to be undertaken for any HMP update or amendment	Section 1.7.2 and Section 6.7 (Table 6-2, management measure HMM11) have been updated to commit to consultation with the RAPs on a six-monthly basis. Section 8.2 has been updated to state that the RAPs will be consulted with in response to any update or amendment of the HMP.	Section 1.7.2 Section 6.7 (Table 6-2 HMM11) Section 8.2
Table 5-1	Please update either the title or contents of Table 5-1 'Potential Impacts to Aboriginal sites and proposed mitigations' as it doesn't include any proposed mitigation measures.	The title of Table 5-1 has been updated to state ' <i>Potential impacts to Aboriginal sites</i> '. Management measures are addressed in Table 6-2.	Section 5.2 (Table 5-1)
Section 6.1	Section 6.1 'No-go zones' needs to be updated to include the requirement for exclusion fencing of no-go zones to occur prior to any construction works. The procedure for determining the position of exclusion fencing on the ground during installation also needs to be included, for example participation of RAPs and an archaeologist.	Section 6.1 has been updated to state that the RAPs will be involved in establishing the no-go zones prior to construction commencing.	Section 6.1
Section 6.3	Please update Section 6.3 'Impacts outside the approved disturbance area'. Section 89A of the <i>National Parks and Wildlife to</i> <i>Act 1974</i> refers to the requirement to provide the details of any known Aboriginal site to AHIMS, it does not address impacts to those objects. In the event of potential unapproved impacts to Aboriginal objects, works in the area must stop and the potential impact must be reported to Heritage NSW and DPHI compliance (heritagemailbox@evironment.nsw.gov.au and compliance@planning.nsw.gov.au).	Section 6.3 has been updated to state the following: "If impacts occur to heritage items outside of the approved disturbance area, these impacts will be classified as an incident and will be investigated by the Construction Contractor and a nominated RAP representative. The incident report will be prepared by the Construction Contractor, in consultation with the RAP. The incident will be reported to the Construction Contractor Environmental Advisor, Neoen Project Manager, RAP representative, as well as Heritage NSW (heritagemailbox@environment.nsw.gov.au) and DPHI compliance (compliance@planning.nsw.gov.au). Work in the immediate vicinity will cease immediately and will not comment until advice to continue is provided by the Project Archaeologist."	Section 6.3

Section of comment	Comment	Neoen Response	Section Amended
Section 6.4 Section 6.5	Please update Section 6.4 'Unexpected finds protocol' and Section 6.5 'Skeletal remains'. Any management actions must be developed in consultation with RAPs and Heritage NSW. Implementation of management actions requires authorisation from Heritage NSW	 Section 6.4 - Unexpected finds protocol has been updated as follows: Point 2 The Environmental Advisor should be notified immediately; they will then notify the Neoen Project Manager and the nominated RAP representative. Point 5 "Within five days of the heritage items being uncovered, the Project Archaeologist, Environmental Advisor and Neoen Project Manager will facilitate the involvement of any relevant RAPs (if the item is of Aboriginal cultural value) and Heritage NSW to recommend the most appropriate course of action". Section 6.5 - Skeletal remains protocol has been updated as follows: Point 7 If the remains are considered to be Aboriginal, the discovery will be reported to Heritage NSW and RAPs within a reasonable time of becoming aware of the location or discovery of the remains. An Archaeological Management Plan will be prepared, and potential management actions will be developed in consultation with the RAPs and Heritage NSW. 	Section 6.4 Section 6.5
Section 6.6	Section 6.6 needs to include the strategy for long term management of Aboriginal heritage items established with the RAPs as per Condition 829 (e)(ii).	Section 6.6 has been updated to include a procedure for the long- term management of Aboriginal heritage items.	Section 6.6
Appendix C	Appendix C does not include a methodology for the surface salvage of objects please include a methodology for the collection of surface aboriginal objects in accordance with the approval.	Appendix D has been updated to include a surface salvage procedure.	Appendix D
Appendix D Section 1.3	Please update Appendix D Section 1.3 'Discovery of non aboriginal archaeological relics', Heritage NSW should be notified rather than the Heritage Council of NSW.	The text in this section has been updated to state that Heritage NSW would be notified.	Appendix D Section 2.3



Our ref: SSD-10807896-PA-5

Alexis Good Project Manager Neoen Australia Pty Ltd Level 21 570 George Street Sydney NSW 2000 23/08/2024

Subject: Thunderbolt Wind Farm - Heritage Management Plan request for information

Dear Ms Good,

Reference is made to the Heritage Management Plan (Revision G dated 5 August 2024) submitted as required by Schedule 2, Condition B29 of SSD-10807896 (the consent) to the NSW Department of Planning, Housing and Infrastructure (the Department).

After careful consideration, the Department is requesting that you provide additional information. As discussed in our telephone call on 23 August 2024, please submit a revised Heritage Management Plan that addresses the points below by 20 September 2024 (or if you cannot meet this timeframe to advise the Department as soon as possible):

- more information regarding the proposed TWFR1 repatriation site (AHIMS# 20-6-0094). This should include:
 - o clearer labelling on figures and in tables that TWFR1 is a repatriation site,
 - \circ a procedure for determining when TWFR1 will be used, and
 - how TWFR1 relates to Section 6.6 for the long-term management of Aboriginal heritage items;
- no-go zones are identified in Table 6-1, Figure 6-1, Figure 6-2 and Appendix D. As described in Section 6.1, no ground disturbing impacts will be permitted within the no-go zones, however, if impacts to these no-go zones cannot be avoided, then a program of surface collection or salvage excavation must be undertaken prior to construction. Please provide a clear procedure for:
 - o how it will be determined that impacts to no-go zones cannot be avoided,
 - o determining the extent of impacts (including correct GPS points),
 - o communication between Neoen and the construction contractor, and



 who will be responsible for activities such as re-fencing of any partially salvaged no-go zones.

Should you wish to discuss the matter further, please contact Katie Weekes on (02)4927 3223 or via email at <u>katie.weekes@dpie.nsw.gov.au</u>

Yours sincerely

Nicole Brewer Director Energy Assessments

As nominee of the Planning Secretary

Table B3 Department of Planning, Housing and Infrastructure

Section of comment	Comment	Neoen Response	Section Amended
Throughout	 More information regarding the proposed TWF R1 repatriation site (AHIMS# 20-6-0094). This should include: Clearer labelling on figures and in tables that TW FR1 is a repatriation site, 	All tables and text has been updated to clearly specify that TWFR1 is an artefact repatriation site. All figures which include "TWFR1" have been updated to include a "Repatriation site" label. This includes Figure 6-1 and Appendix C Figure 5.	Table 4-2 Table 5-2 Table 6-1 Table 6-2 Section 6.2.1 Figure 6-1 Appendix C Figure 5.
	A procedure for determining when TWFR1 will be used, and	 A new section 6.7 has been included to detail the procedure. During the final detailed design stage and prior to construction commencing, the Construction Contractor, in consultation with Neoen, will determine whether the no-go zones as identified Table 6-1, Figure 6-1, Figure 6-2 and Appendix D can be avoided. The sites that cannot be avoided will be identified during this process. For no go zones that cannot be avoided or are partially impacted, the extent of impacts (including correct GPS coordinates) will be recorded on the heritage a tracker or register. A template tracker is provided in Appendix E. Once this has been confirmed, the salvage collection and excavation procedure (Section 6.2 and Appendix D) will be followed in consultation with Neoen and the RAPs. If RAPs wish for artefact reburial to take place in a nearby location, the process detailed in Section 6.2.3 will be followed. Additionally in the event of an expected find (Section 6.4), consultation with the RAPs will be undertaken to determine whether it is appropriate to salvage and if reburial is required. A new Section 6.2.3 has also been included to address the process for reburial should this be required. This section states <i>"If RAPs wish for artefact reburial to take place in a nearby location, such as repatriation site TWFR1, that process will follow the guidelines laid out in requirement 26 of the Code of Practice</i> 	Section 6.7 Section 6.2.3

SSD-10807896: Thunderbolt Wind Farm

Section of comment	Comment	Neoen Response	Section Amended
		for Archaeological Investigation of Aboriginal Objects in NSW (DECCW, 2010). The place of burial will be agreed in consultation with the archaeologist, RAPs, Neoen and the landholder".	
Section 6.6	 How TWFR1 relates to Section 6.6 for the long-term management of Aboriginal heritage items; 	Section 6.6. has been updated to state that "As detailed in Section 6.2.3, the relocation site for Aboriginal artefacts will be developed in consultation with the archaeologist, RAPs, Neoen and the landholder. TWFR1 (AHIMS# 20-6-0094) has been identified as a potential repatriation zone. This site is outside the proposed approved development footprint within the Project Area and outside the required buffer zone around any Aboriginal sites not approved for impacts.	Section 6.6
2 and Appendix disturbing impact however, if impact then a program must be underta Please provide a • How it will b	 No-go zones are identified in Table 6-1, Figure 6-1, Figure 6-2 and Appendix D. As described in Section 6.1, no ground disturbing impacts will be permitted within the no-go zones, however, if impacts to these no-go zones cannot be avoided, then a program of surface collection or salvage excavation must be undertaken prior to construction. Please provide a clear procedure for: How it will be determined that impacts to no-go zones cannot be avoided, 	 During the final detailed design stage and prior to construction commencing, the Construction Contractor, in consultation with Neoen, will determine whether the no-go zones as identified Table 6-1, Figure 6-1, Figure 6-2 and Appendix D can be avoided. For example, where possible micrositing of access roads will be undertaken to avoid or minimise The following sites could be avoided or impacts minimised: Pine Creek 1 (AHIMS# 20-6-0086) – impacts to this site could be minimised if the access road is microsited TWF IA1 (AHIMS #20-6-0090) – could be avoided if one of the access roads is microsited to avoid the fenced buffer area. TWF IA2 (AHIMS #20-6-0091) – could be avoided if the access road is microsited to avoid the fenced buffer area. TWF IA2 (AHIMS #20-6-0091) – could be avoided if the access road is microsited to avoid the fenced buffer area. TWF IA2 (AHIMS #20-6-0091) – could be avoided if the access road is microsited to avoid the fenced buffer area. TWF IA2 (AHIMS #20-6-0091) – could be avoided if the access road is microsited to avoid the fenced buffer area. The following site are unlikely to be avoided: Spring Creek 1 (AHIMS# 20-6-0083) – unlikely to be avoided unless both access roads can be microsited. Pine Creek 2 (AHIMS# 20-6-0085) - unlikely to be avoided. Pine Creek 3 (AHIMS# 20-6-0084) - unlikely to be avoided. 	Section 6.1.1

Section of comment	Comment	Neoen Response	Section Amended
		 TWF IA3 (AHIMS #20-6-0092) - located within a hardstand so likely to be impacted. There is space for micrositing of the hardstand but would need to be agreed based on constructability. 	
		 Potential Stone Arrangement 4 - Potentially avoided if it is possible to microsite the hardstand. 	
		The following site are likely to be avoided:	
		• TWF R1 (AHIMS# # 20-6-0094) Repatriation site. With the appropriate fencing and buffer zone, the site is located sufficiently far from construction activities to be avoided.	
		• TWF IA4 (AHIMS #20-6-0093) – already avoided by the road, but probably need to microsite marginally to avoid the fenced buffer zone.	
		 Potential Stone Arrangement 2 – with the appropriate fencing and buffer zone, the site is located sufficiently far from construction activities to be avoided. 	
		 Potential Stone Arrangement 3 – with the appropriate fencing and buffer zone, the site is located sufficiently far from construction activities to be avoided. 	
		A new section 6.1.1 has been included and makes the process for determining impacts and the procedure to be followed if impacts are avoided and if impacts cannot be avoided.	
	 Determining the extent of impacts (including correct GPS points), 	For no go zones that cannot be avoided or are partially impacted, the extent of impacts (including correct GPS coordinates) will be recorded on the heritage a tracker or register. A template tracker is provided in Appendix E.	Section 66.1 Appendix E
		A new section 6.1.1 has been included and makes the process for determining impacts and the procedure to be followed if impacts are avoided and if impacts cannot be avoided.	

Section of comment	Comment	Neoen Response	Section Amended
	Communication between Neoen and the construction contractor, and	A new section (Section 7.1.4 Relationship between Construction Contractor and Neoen) has been included in the "Roles and Responsibility" section. This section states:	Section 7.1.4
		An on-site Owner's Engineer (OE) who represents Neoen, will be responsible for undertaking weekly site meetings. The Construction Contractor is also required to provide weekly and monthly reports to OE and Neoen. This will include:	
		• Regular compliance reporting and regular internal environmental audits will be undertaken. This will include assessment of compliance with the HMP. High risk areas will be specifically checked during these internal audits	
		• The Construction Contractor must provide an ESWMS to Neoen prior to commencing work within or near no-go zones (Section 6.1.1)	
		Management of the Construction Contractor and their compliance with the HMP will be monitored and reviewed through the procedures described in in the HMP.	
	Who will be responsible for activities such as re-fencing of any partially salvaged no-go zones.	Neoen will be responsible for all Aboriginal Heritage repatriations, excavations and RAP consultation. The construction contractor will be responsible for managing the fencing contractor.	Section 7.1
		Section 7.1 has been updated to include more detailed roles and responsibilities for Neoen and the construction contractor.	

Table B4: Response to Nunawanna Aboriginal Corporation comments

Section of comment	Comment	Neoen Response	Section Amended
Section 6.3	NAC would like to work together in a respectful manner in doing so would like to be notified immediately if any cultural material is re- discovered so that it can be protected in a safe and efficient manner.	Section 6.3 has been updated to state that the RAPs will be notified immediately of any discovery of Aboriginal items.	Section 6.3
Section 7.3	NAC recommends that Heritage monitoring be used for the initial ground disturbance. Through the report Aboriginal sites have been referred to by the archaeologist as of low significance. To NAC all artefacts and cultural material hold similar value.	Noted. Neoen will endeavour to minimise potential impacts to Aboriginal Heritage items. No- go zones will be established as described in Section 6.1 to demarcate the sensitive heritage locations.	N/A
General	However, these are suggestions as we understand the complexities involved. As NAC, is a registered Stakeholder and Traditional Owner, I would like to suggest that Nunawanna Aboriginal Corporation be the point of contact for this project. NAC would also like to acknowledge this report has not mentioned the RAP groups involved in the report and we mean no disrespect to those parties.	Neoen will endeavour to keep NAC informed of the Projects process, as well as the other RAPs involved with the Project.	N/A

Table B5: Responses to Nyakka Aboriginal Corporation comments

Section of comment	Comment	Neoen Response	Section Amended
Section 6.1	 The installation of Heritage fencing for the NO-GO areas should be conducted by an experienced local Aboriginal fencing company. The installation of Heritage fencing for the NO-GO areas should be monitored by a Registered RAP involved in the project. Signage should be erected to outlining the responsibilities and fines that are associated with the Heritage zone. All Aboriginal Heritage Zones will be maintained by a local Aboriginal Heritage management company. 	Section 6.1 has been updated to state the following: The no-go zones involve a fenced off 10 m buffer area around each of the above-mentioned heritage locations. Fence installation will be established in consultation with, and monitored by the RAPs prior to construction works commencing. Installation of the no-go zones by a local Aboriginal fencing company will be considered where possible No ground disturbing impacts will be permitted within these 'no-go zones'. Signage will be established to identify the no-go zone and consequences for trespassing or impacting the area. Once instated the no-go zones should not require ongoing management. However, if maintenance is required a local Aboriginal Heritage management company may be considered following the appropriate procurement process.	Section 6.1
Section 6.2.1	• The surface salvage program will be undertaken by Neoen, the Archaeologist and the registered Aboriginal parties involved in the project, prior to any construction commencing.	Section 6.2.1 has been updated to state the RAPs involvement in the surface salvage program.	Section 6.2.1 Appendix D
Section 6.2.2	 If the impacts from the proposed works cannot be avoided at Spring Creek 1(AHIMS# 20-6-0083), Pine Creek 3 (AHIMS# 20-6-0084), Pine Creek 1 (AHIMS# 20-6-0086) and Pine Creek 2 (AHIMS# 20-6-0085), then it is recommended that a program of salvage excavation be carried out prior to construction to mitigate harm to cultural heritage values. All salvage excavations will be limited to the footprint of the proposed works, within the identified PAD at those sites. The four sites should be treated the same, they are both regarded as highly Culturally significant to the registered Aboriginal Parties. 	It is acknowledged that Nyakka Aboriginal Corporation consider these sites as highly Culturally significant. Cultural Heritage consultation and assessment for the site has been undertaken in accordance the relevant guidelines and in accordance with mandatory timeframes. Agencies and RAPs were given the opportunity to review and comment on the methodologies and mitigation measures proposed. This mitigation and management outcome was detailed in the Archaeological Report (Lantern, November 2023) covering the test excavation program at these four archaeological deposits (PADs). Every effort will be undertaken to avoid the sites, but this may not be feasible.	N/A

Section of comment	Comment	Neoen Response	Section Amended
Section 6.3	 If impacts occur to heritage items outside of the approved disturbance area the incident will be investigated by the Construction Contractor and a nominated RAP representative and an incident report will be prepared by both. The incident will be reported to the Environmental Advisor/ Neoen Project Manager and the nominated RAP representative, work in the immediate vicinity will cease until advice to continue is provided by the Project Archaeologist. 	Section 6.3 has been updated to state the following: "If impacts occur to heritage items outside of the approved disturbance area, these impacts will be classified as an incident and will be investigated by the Construction Contractor and a nominated RAP representative. The incident report will be prepared by the Construction Contractor, in consultation with the RAP. The incident will be reported to the Construction Contractor Environmental Advisor, Neoen Project Manager, RAP representative, as well as Heritage NSW (heritagemailbox@environment.nsw.gov.au) and DPHI compliance (compliance@planning.nsw.gov.au). Work in the immediate vicinity will cease immediately and will not comment until advice to continue is provided by the Project Archaeologist."	Section 6.3
Section 6.4	 In the event that any heritage items, or potential heritage items are identified during the course of construction, works in the immediate vicinity of the find will cease, the Construction Contractor/ Environmental Advisor and nominated RAP representative will be notified. All construction that could potentially harm the heritage items will cease (within 10 m of the find). Only construction that is required to comply with operational and environmental health and safety standards and/or to protect the cultural heritage should occur. A nominated RAP representative should monitor the questionable activities. The Environmental Advisor should be notified immediately; they 	The text of Section 6.4 has been updated to state the following: <i>"In the event that any heritage items, or potential heritage items are</i> <i>identified during the course of construction, works in the immediate</i> <i>vicinity of the find will cease and the Construction Contractor /</i> <i>Environmental Advisor and nominated RAP representative will be</i> <i>notified."</i> The RAPs would be notified in the event that an unexpected find occurs onsite. The RAPs, in consultation with Heritage NSW, would recommend the most appropriate course of action and potential management.	Section 6.4
	 will then notify the Neoen Project Manager and nominated RAP representative. The Project Archaeologist will be contacted, and if required, a preliminary assessment and recording of the item will be undertaken. The location, context and value of the heritage item will be recorded as determined by the Project Archaeologist. The Project Archaeologist will be contacted, and if required, a preliminary assessment and recording of the item will be 		

Section of comment	Comment	Neoen Response	Section Amended
	undertaken. The location, context and value of the heritage item will be recorded as determined by the Project Archaeologist and nominated RAP representative. The inclusion of the nominated RAP representative in all instances will null invoid clause 5.		
Section 6.6	A local Aboriginal Heritage management company should be contracted to maintain all of the Heritage sites on a regular basis.	Neoen will investigate the use of a Local Aboriginal Heritage management company for the maintenance of the heritage sites. If maintenance is required a local Aboriginal Heritage management company may be considered following the appropriate procurement process.	N/A
Section 7.2	 A Cultural induction will need to be developed by Neon, Construction Contractor and the Registered Aboriginal Parties. The induction should be delivered to all new staff and contractors alike. A monthly Cultural induction should be delivered by a nominated Registered Aboriginal Parties. 	Neoen will collaborate with the RAPs to deliver a cultural heritage induction for new staff and contractors. It is proposed that a Welcome to Country video for the site will be recorded and included in the Cultural heritage induction, which will describe the Cultural heritage associated with the site, what artefacts may look like, no-go zones, the procedures around unexpected finds etc. A video recorded induction will ensure that all contractors and new staff have received the Cultural induction prior to commencing work at the Site.	N/A

Section of comment	Comment	Neoen Response	Section Amended
Section 7.3	All Monitoring and inspection will involve Neon, Construction Contractor and the Registered Aboriginal Parties.	 Monitoring and inspections are detailed in Section 7 of the EMS. These generally include: Weekly site environmental inspection which will include an overall site inspection and would also include a focus on works occurring next to or within sensitive areas, including no-go zones. Inspections of exclusion fencing, and no-go areas will be undertaken weekly to ensure that fences or bunting (whatever is used to demarcate the zones) are suitably maintained and signage is in place. The need for maintenance of this fencing and signage will be identified at this stage. It is not practical to have Neon and the RAPs at these inspections. However, as indicated above, when salvage operations occur, in the event there is an unexpected find, and in the event there is an incident associated with the Cultural heritage, the RAPs will be notified and will be involved in and/or consulted as required in accordance with the legislation and the procedures. 	N/A

Table B6: Responses to Iwatta Aboriginal Corporation comments

Section of comment	Comment	Neoen Response	Section Amended
Section 6.1	 The installation of Heritage fencing for the NO-GO areas should be conducted by an experienced local Aboriginal fencing company. The installation of Heritage fencing for the NO-GO areas should be monitored by a Registered RAP involved in the project. Signage should be erected to outlining the responsibilities and fines that are associated with the Heritage zone. All Aboriginal Heritage Zones will be maintained by a local Aboriginal Heritage management company. 	Section 6.1 has been updated to state the following: The no-go zones involve a fenced off 10 m buffer area around each of the above-mentioned heritage locations. Fence installation will be established in consultation with, and monitored by the RAPs prior to construction works commencing. Installation of the no-go zones by a local Aboriginal fencing company will be considered where possible No ground disturbing impacts will be permitted within these 'no-go zones'. Signage will be established to identify the no-go zone and consequences for trespassing or impacting the area. Once instated the no-go zones should not require ongoing management. However, if maintenance is required a local Aboriginal Heritage management company may be considered following the appropriate procurement process.	Section 6.1
Section 6.2.1	• The surface salvage program will be undertaken by Neoen, the Archaeologist and the registered Aboriginal parties involved in the project, prior to any construction commencing.	Section 6.2.1 has been updated to state the RAPs involvement in the surface salvage program.	Section 6.2.1 Appendix D
Section 6.2.2	 If the impacts from the proposed works cannot be avoided at Spring Creek 1(AHIMS# 20-6-0083), Pine Creek 3 (AHIMS# 20-6-0084), Pine Creek 1 (AHIMS# 20-6-0086) and Pine Creek 2 (AHIMS# 20-6-0085), then it is recommended that a program of salvage excavation be carried out prior to construction to mitigate harm to cultural heritage values. All salvage excavations will be limited to the footprint of the proposed works, within the identified PAD at those sites. The four sites should be treated the same, they are both regarded as highly Culturally significant to the registered Aboriginal Parties. 	It is acknowledged that Nyakka Aboriginal Corporation consider these sites as highly Culturally significant. Cultural Heritage consultation and assessment for the site has been undertaken in accordance the relevant guidelines and in accordance with mandatory timeframes. Agencies and RAPs were given the opportunity to review and comment on the methodologies and mitigation measures proposed. This mitigation and management outcome was detailed in the Archaeological Report (Lantern, November 2023) covering the test excavation program at these four archaeological deposits (PADs). Every effort will be undertaken to avoid the sites, but this may not be feasible.	N/A

Section of comment	Comment	Neoen Response	Section Amended
Section 6.3	 If impacts occur to heritage items outside of the approved disturbance area the incident will be investigated by the Construction Contractor and a nominated RAP representative and an incident report will be prepared by both. The incident will be reported to the Environmental Advisor/ Neoen Project Manager and the nominated RAP representative, work in the immediate vicinity will cease until advice to continue is provided by the Project Archaeologist. 	Section 6.3 has been updated to state the following: "If impacts occur to heritage items outside of the approved disturbance area, these impacts will be classified as an incident and will be investigated by the Construction Contractor and a nominated RAP representative. The incident report will be prepared by the Construction Contractor, in consultation with the RAP. The incident will be reported to the Construction Contractor Environmental Advisor, Neoen Project Manager, RAP representative, as well as Heritage NSW (heritagemailbox@environment.nsw.gov.au) and DPHI compliance (compliance@planning.nsw.gov.au). Work in the immediate vicinity will cease immediately and will not comment until advice to continue is provided by the Project Archaeologist."	Section 6.3
Section 6.4	 In the event that any heritage items, or potential heritage items are identified during the course of construction, works in the immediate vicinity of the find will cease, the Construction Contractor/ Environmental Advisor and nominated RAP representative will be notified. All construction that could potentially harm the heritage items will cease (within 10 m of the find). Only construction that is required to comply with operational and environmental health and safety standards and/or to protect the cultural heritage should occur. A nominated RAP representative should monitor the questionable activities. The Environmental Advisor should be notified immediately; they 	The text of Section 6.4 has been updated to state the following: <i>"In the event that any heritage items, or potential heritage items are</i> <i>identified during the course of construction, works in the immediate</i> <i>vicinity of the find will cease and the Construction Contractor /</i> <i>Environmental Advisor and nominated RAP representative will be</i> <i>notified."</i> The RAPs would be notified in the event that an unexpected find occurs onsite. The RAPs, in consultation with Heritage NSW, would recommend the most appropriate course of action and potential management.	Section 6.4
	 will then notify the Neoen Project Manager and nominated RAP representative. The Project Archaeologist will be contacted, and if required, a preliminary assessment and recording of the item will be undertaken. The location, context and value of the heritage item will be recorded as determined by the Project Archaeologist. The Project Archaeologist will be contacted, and if required, a preliminary assessment and recording of the item will be 		

Section of comment	Comment	Neoen Response	Section Amended
	undertaken. The location, context and value of the heritage item will be recorded as determined by the Project Archaeologist and nominated RAP representative. The inclusion of the nominated RAP representative in all instances will null invoid clause 5.		
Section 6.6	A local Aboriginal Heritage management company should be contracted to maintain all of the Heritage sites on a regular basis.	Neoen will investigate the use of a Local Aboriginal Heritage management company for the maintenance of the heritage sites. If maintenance is required a local Aboriginal Heritage management company may be considered following the appropriate procurement process.	N/A
Section 7.2	 A Cultural induction will need to be developed by Neon, Construction Contractor and the Registered Aboriginal Parties. The induction should be delivered to all new staff and contractors alike. A monthly Cultural induction should be delivered by a nominated Registered Aboriginal Parties. 	Neoen will collaborate with the RAPs to deliver a cultural heritage induction for new staff and contractors. It is proposed that a Welcome to Country video for the site will be recorded and included in the Cultural heritage induction, which will describe the Cultural heritage associated with the site, what artefacts may look like, no-go zones, the procedures around unexpected finds etc. A video recorded induction will ensure that all contractors and new staff have received the Cultural induction prior to commencing work at the Site.	N/A
Section 7.3	All Monitoring and inspection will involve Neon, Construction Contractor and the Registered Aboriginal Parties.	 Monitoring and inspections are detailed in Section 7 of the EMS. These generally include: Weekly site environmental inspection which will include an overall site inspection and would also include a focus on works occurring next to or within sensitive areas, including no-go zones. Inspections of exclusion fencing, and no-go areas will be undertaken weekly to ensure that fences or bunting (whatever is used to demarcate the zones) are suitably maintained and signage is in place. The need for maintenance of this fencing and signage will be identified at this stage. It is not practical to have Neon and the RAPs at these inspections. However, as indicated above, when salvage operations occur, in the event there is an unexpected find, and in the event there is an incident 	N/A

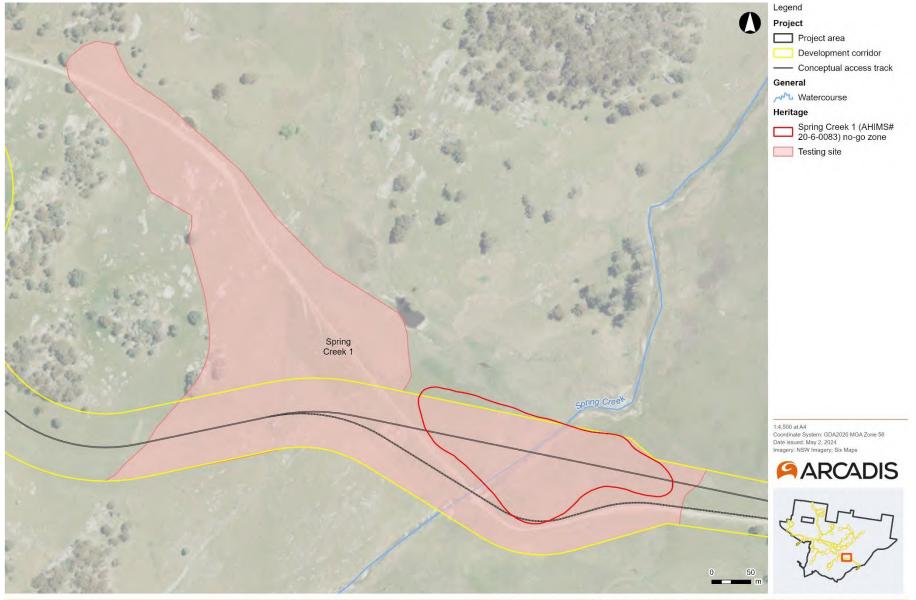
Section of comment	Comment	Neoen Response	Section Amended
		associated with the Cultural heritage, the RAPs will be notified and will be involved in and/or consulted as required in accordance with the legislation and the procedures.	

APPENDIX C No-go zone figures

Locations of no-go zones

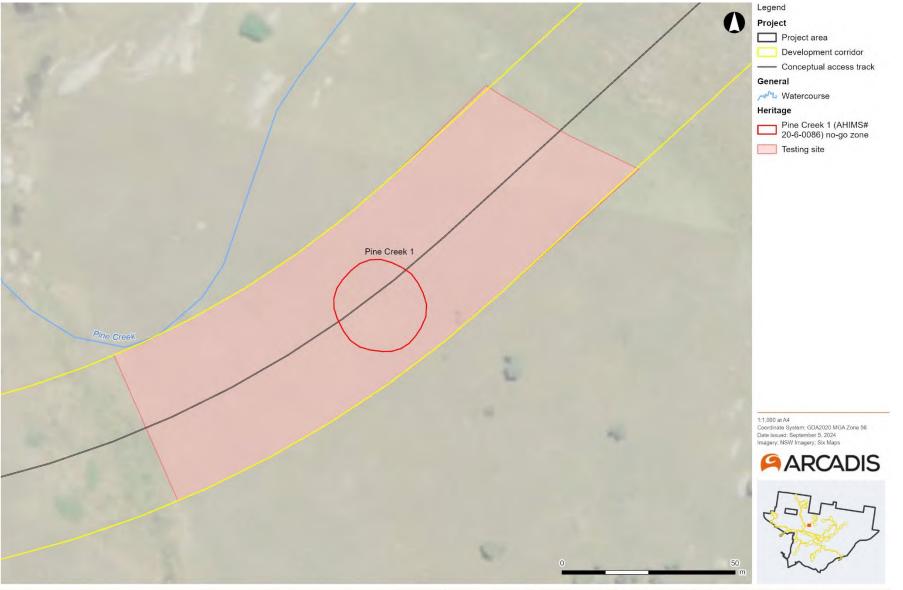
Location	Figure
• Spring Creek 1 (AHIMS# 20-6-0083)	Appendix C Figure 1
• Pine Creek 1 (AHIMS# 20-6-0086)	Appendix C Figure 2
• Pine Creek 2 (AHIMS# 20-6-0085)	Appendix C Figure 3
• Pine Creek 3 (AHIMS# 20-6-0084)	Appendix C Figure 4
• TWF R1 (AHIMS# # 20-6-0094) Artefact repatriation site	Appendix C Figure 5
• TWF IA1 (AHIMS #20-6-0090)	Appendix C Figure 6
• TWF IA2 (AHIMS #20-6-0091)	Appendix C Figure 7
• TWF IA3 (AHIMS #20-6-0092)	Appendix C Figure 8
• TWF IA4 (AHIMS #20-6-0093)	Appendix C Figure 9
Potential Stone Arrangement 2	Appendix C Figure 10
Potential Stone Arrangement 3	Appendix C Figure 11
Potential Stone Arrangement 4	Appendix C Figure 12

If impacts to these no-go zones cannot be avoided, then a program of salvage excavation will be undertaken prior to construction. See Section 6.2 for more details.



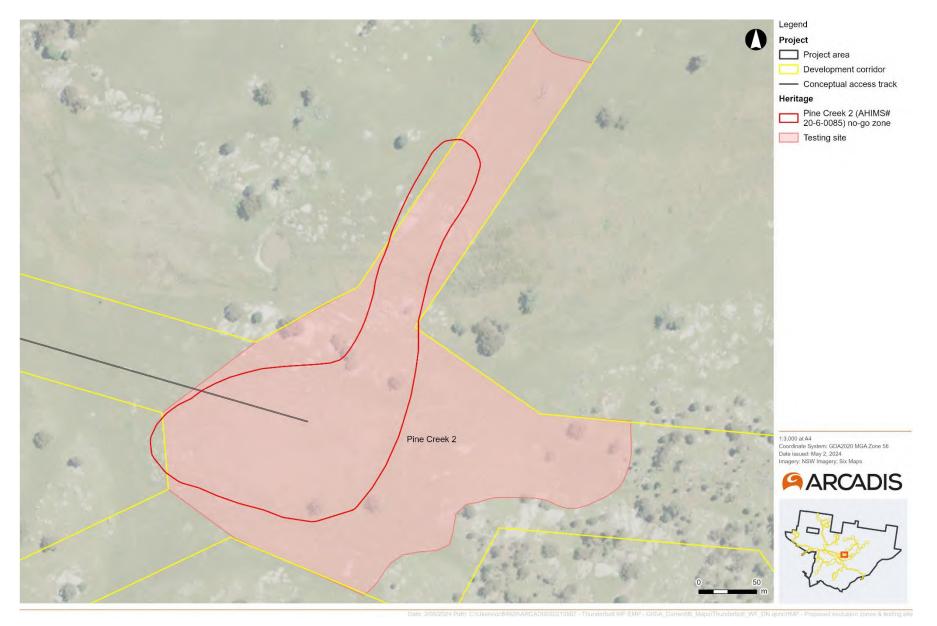
Date: 2/05/2024 Path: C/Usersidn84920ARCADI3/30213557 - Thunderbit WF EMP--GISIA_Current/B_Maps/Thunderbit_WF_DN aprXHMP - Proposed exclusion zones & testing

Appendix C Figure 1: Proposed no-go zone at Spring Creek 1 (AHIMS# 20-6-0083)

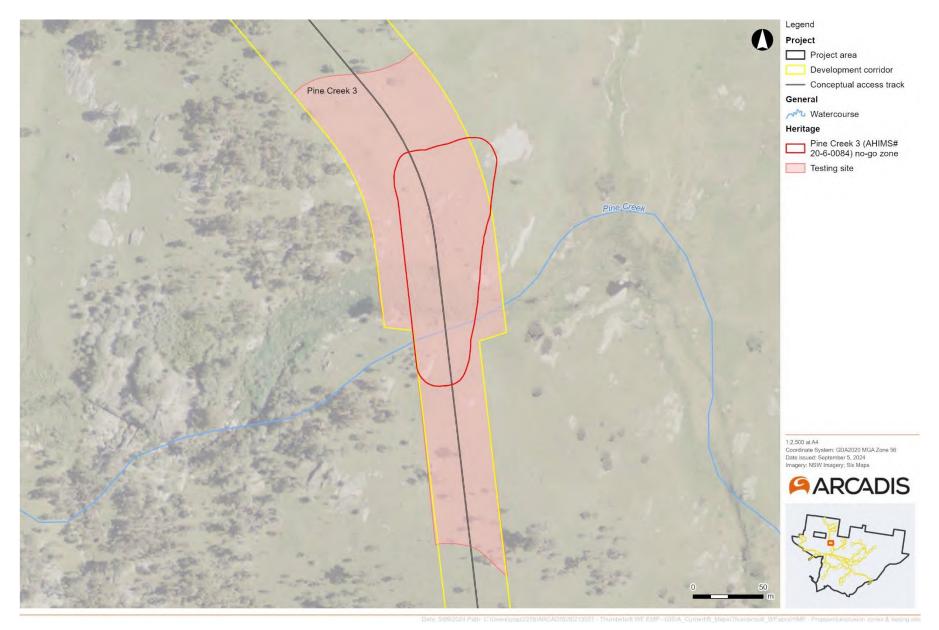


Date: 5/08/2024 Path: C/Users/gcaz2278/ARCADIS/30213557 - Thunderboll WF EMP - GIS/A_Current/IB_Maps/Thunderboll_WF.aptX/HMP - Proposed exclusion zones & tasting sit

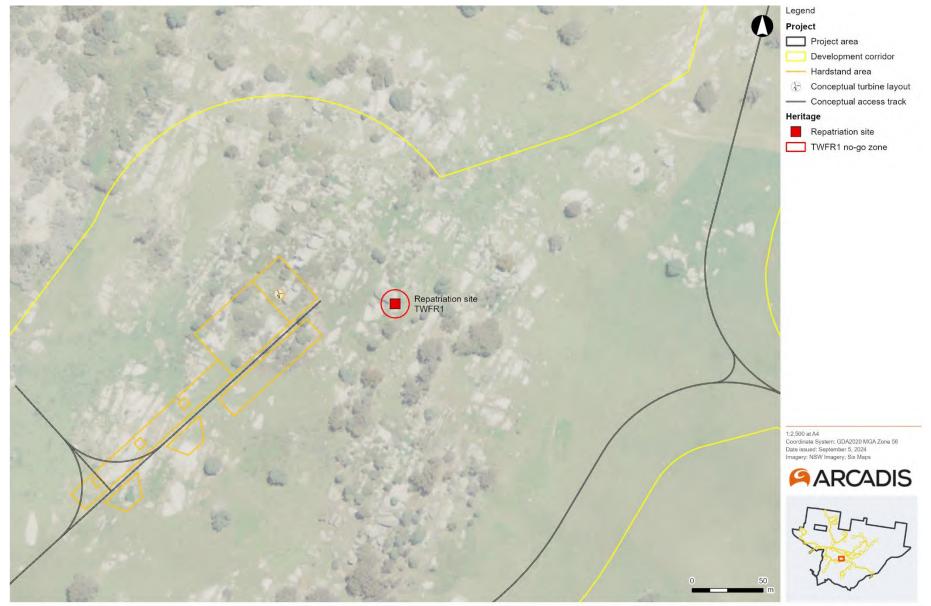
Appendix C Figure 2: Proposed no-go zone at Pine Creek 1 (AHIMS# 20-6-0086)



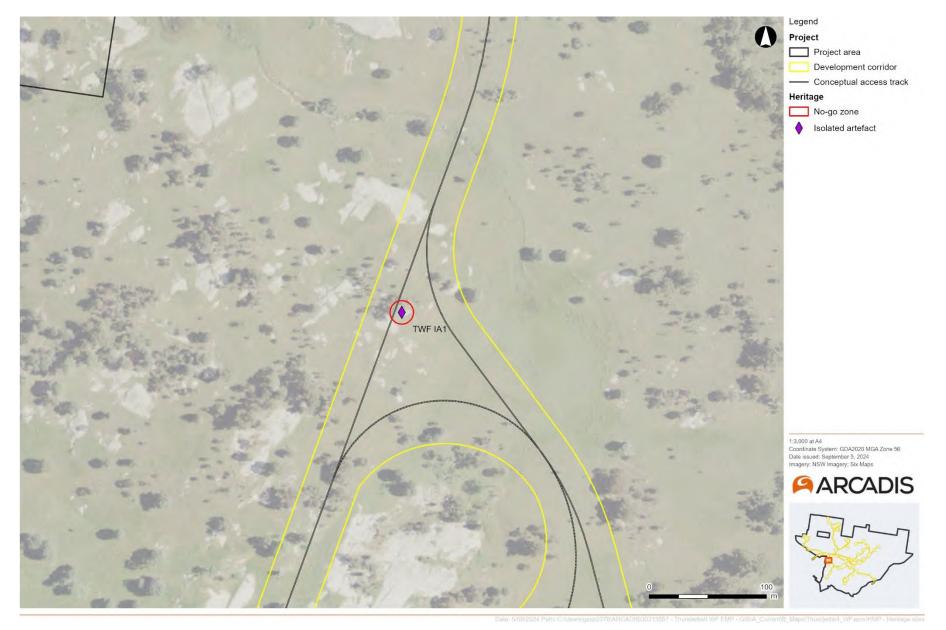
Appendix C Figure 3: Proposed no-go zone at Pine Creek 2 (AHIMS# 20-6-0085)



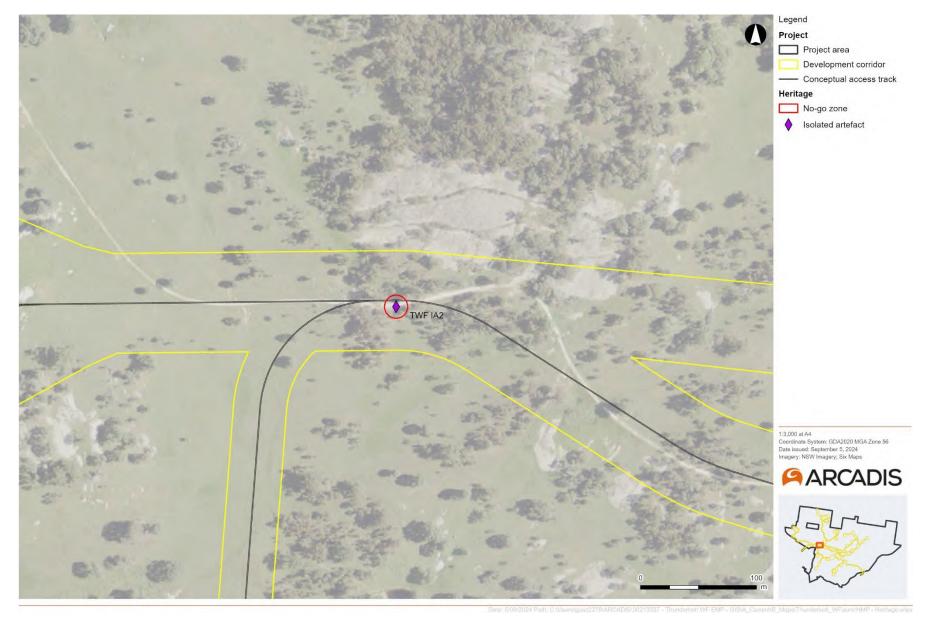
Appendix C Figure 4: Proposed no-go zone at Pine Creek 3 (AHIMS# 20-6-0084)



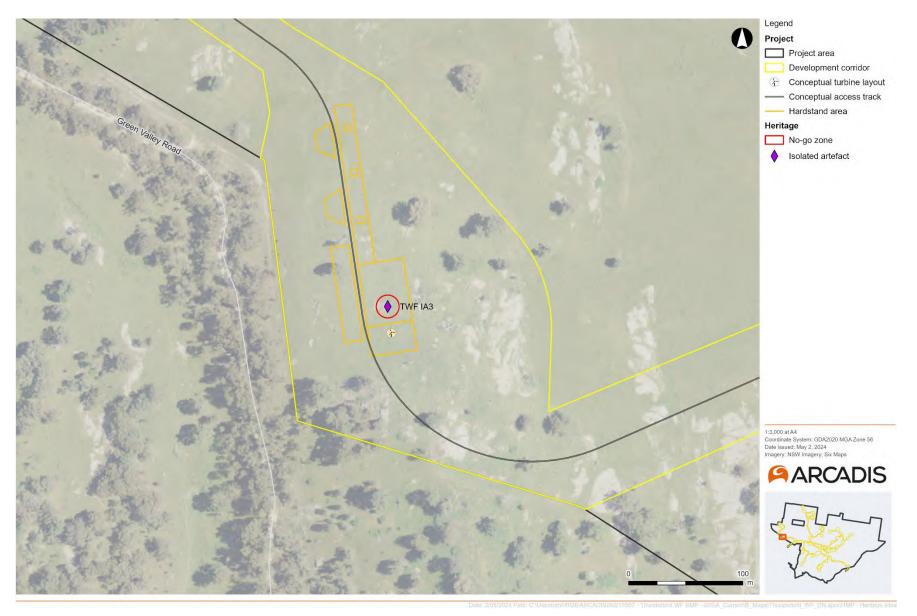
Appendix C Figure 5: Proposed no-go zone at Artefact repatriation site TWF R1 (AHIMS# # 20-6-0094)



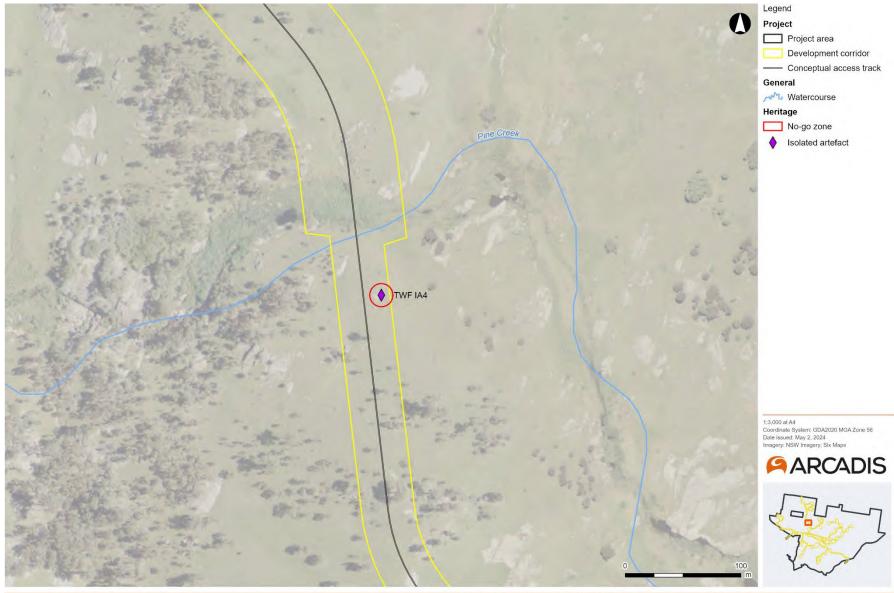
Appendix C Figure 6: Proposed no-go zone at TWF IA1 (AHIMS #20-6-0090)



Appendix C Figure 7: Proposed no-go zone at TWF IA2 (AHIMS #20-6-0091)

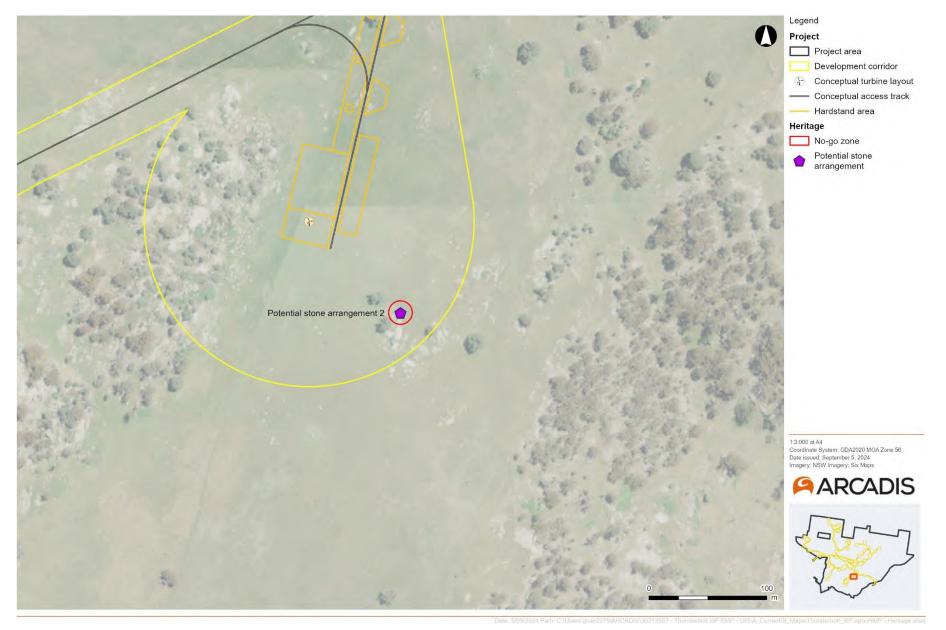


Appendix C Figure 8: Proposed no-go zone at TWF IA3 (AHIMS #20-6-0092)

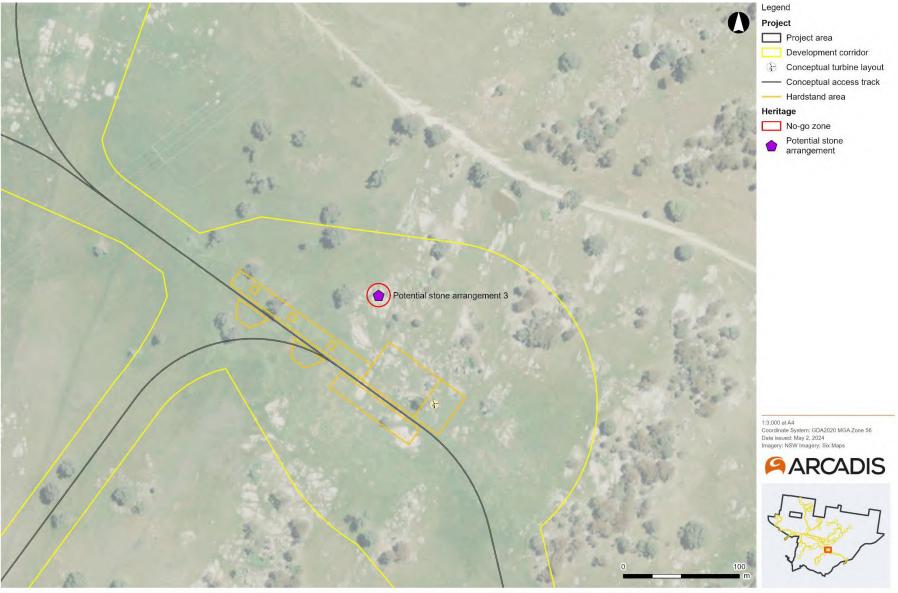


Date: 2/05/2024 Path: C:\Users\dn84926\ARCADIS\30213557 - Thunderbolt WF EMP - GIS\A_Current\B_Maps\Thunderbolt_WF_DN.aprx\HMP - Herriage site

Appendix C Figure 9: Proposed no-go zone at TWF IA4 (AHIMS #20-6-0093)

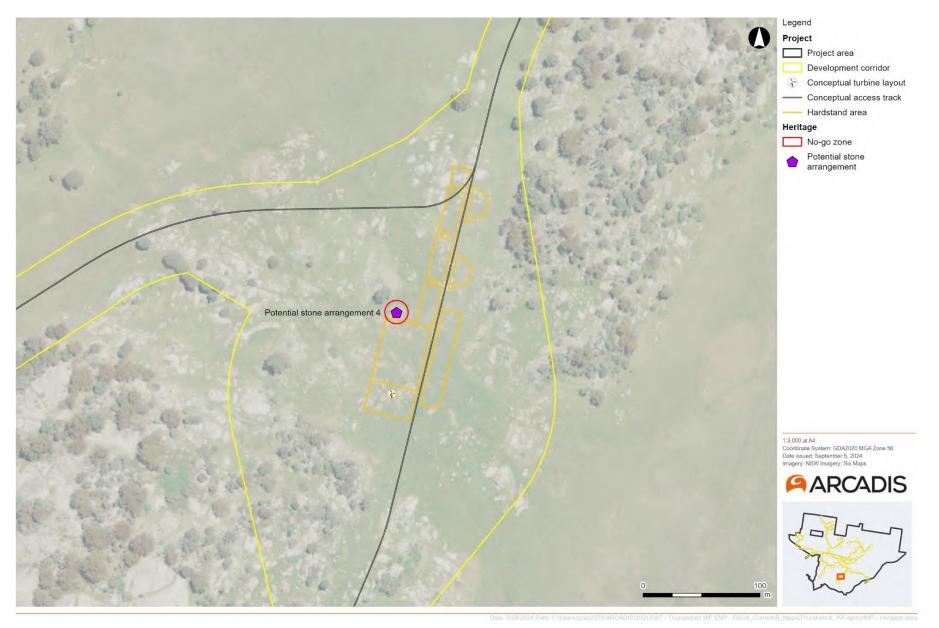


Appendix C Figure 10: Proposed no-go zone at Potential Stone Arrangement 2



Date: 2/05/2024 Path: C/Users/da84926/ARCADIS/30213557 - Thunderboil WF EMP - GISIA_Current/B_Maps/Thunderboil WF DN.apr//HMP - Heritage site

Appendix C Figure 11: Proposed no-go zone at Potential Stone Arrangement 3



Appendix C Figure 12: Proposed no-go zone at Potential Stone Arrangement 4

APPENDIX D Surface Salvage and Salvage Excavation

Procedure

1 SURFACE SALVAGE COLLECTION

In accordance with NSW CoC B29, prior to carrying out any development that could impact the heritage items identified in Table 2 of Appendix 6 (of the Development Consent), the applicant will salvage and relocate the item/s that will be impacted to a suitable alternative location. Surface salvage collection works have been identified as being an appropriate mitigation measure for the following sites:

- TWF IA1 (AHIMS #20-6-0090)
- TWF IA2 (AHIMS #20-6-0091)
- TWF IA3 (AHIMS #20-6-0092)
- TWF IA4 (AHIMS #20-6-0093)
- TWF R1 (AHIMS #20-6-0094) Artefact repatriation site.

The collection program will be undertaken by Neoen and the Archaeologist <u>prior to construction</u> <u>commencing</u> and will entail the following steps.

Surface Salvage Collection Procedure

- 1. Prior to undertaking surface collection fieldwork the archaeologist undertaking the salvage work will confirm that the sites listed above are still within the approved development footprint for the Project, and therefore are unable to be avoided by works, thus requiring surface collection.
- The salvage team will comprise of a qualified archaeologist and selected members of the RAPs. The salvage team
 will take the opportunity to examine the immediate surrounds of the recorded sites to identify any other artefacts
 that may be present within the approved development footprint.
- 3. A reasonable attempt, through the visual inspection of the Aboriginal site/s area, will be made to relocate the originally recorded surface stone artefacts. However, it is acknowledged that changes in the ground surface visibility and other environmental factors may impede the relocation of the recorded artefacts noted in the ACHAR. This is a typical and accepted archaeological phenomenon and therefore salvage collection will focus on visible artefacts within each site.
- 4. If any additional surface artefacts are identified within the approved development footprint these newly identified artefacts will be salvaged with the sites that they are associated with or in accordance with the **Unexpected Finds Protocol** (Section 6.4).
- 5. The salvage team will walk across the Aboriginal site area (within the approved development footprint) and use 'pin' flags to identify and mark artefacts.
- 6. The Aboriginal site area will be photographed.
- 7. If considered necessary, construct a collection grid of 2 m x 2 m or 5 m x 5 m or similar as appropriate to the size of the site, only larger sites or sites with higher densities of artefacts will have this strategy.
- 8. As an alternative, GPS plot artefacts if required, this is suitable for smaller sites.
- 9. Collect artefacts. At each collection site the artefacts will be recorded, bagged and labelled in accordance with their collection position, that is either individual number and/or their collection grid.
- 10. Recording of artefacts will be conducted in line with standard archaeological practice to include raw material, type, dimensions and any other characteristics considered relevant and in accordance with the Code of Practice. Photos of particularly rare items only or those requested to be photographed by the Aboriginal representatives onsite will be taken.
- 11. The salvaged Aboriginal objects may be temporarily stored until the long-term management and relocation of the salvaged objects can occur. The **Procedure for Long-Term Management** is outlined in Section 6.6.
- 12. The site of the relocated salvaged Aboriginal objects will be noted by the submission of site cards to the Aboriginal Heritage Information Management System (AHIMS) as legally required.
- 13. An Aboriginal Site Impact Recording Form will be completed and submitted to AHIMS following harm for each site collected or destroyed from salvage.

1.1 Temporary storage of Surface salvage collection

If the salvaged Aboriginal objects need to be temporarily stored until the long-term management and relocation of the salvaged objects can occur, this will be managed as follows:

- Objects will be stored in boxes in a locked facility during salvage works (e.g. site office)
- Objects will then be stored in locked cabinets at the offices/laboratories where analysis is undertaken until such time as the long-term management and relocation can occur.
- The Procedure for Long-Term Management is outlined in Section 6.6.

2 SALVAGE EXCAVATION

2.1 Research aims

The primary aims of the proposed salvage excavation at each of the identified archaeological sites prior to construction impact is to recover a representative sample of cultural material and to analyse and inform:

- Patterns of Aboriginal occupation and site use including information relating to diet, technology and procurement and use of resources
- Establish knowledge of the geomorphological history of the salvage sites, specifically examining the impacts of erosional forces on the archaeological record to further inform future management of the study areas
- Recover samples for dating in order to establish a chronology of site formation and/or use.

In addition to the above salvage aims, the research will enable the recovered cultural material to be repatriated to site in accordance with Aboriginal community protocols.

2.2 Excavation area

Salvage excavation at Spring Creek 1(AHIMS# 20-6-0083) and Pine Creek 3 (AHIMS# 20-6-0084) will target the inferred areas of highest artefact density identified in Lantern Heritage (2023) that are within the footprint of proposed works and will be expanded until:

- The artefact amounts recorded are below the threshold for expansion of four (4) per square metre; or
- If a representative sample has been excavated.

All decisions regarding when to terminate excavation in a given excavation area will be undertaken in consultation between the RAPs and the archaeologists participating in the fieldwork.

2.3 Excavation procedure

The excavation program will be undertaken by Neoen and the Archaeologist <u>prior to construction</u> <u>commencing</u> and will entail the following steps.

Step	Procedures					
Map the excavation area	 Map the excavation area using a differential GPS/total station and record landforms, topography and environmental features. 					
	 Salvage pit placement within the area of proposed works will be decided based on previous investigations (Lantern Heritage, 2023) and in consultation with RAPs. 					
	3. Each 1 m x 1 m salvage pit square will be allocated a unique ID code, which will be recorded on all associated paperwork, photographs and finds bags.					

Step	Procedures					
	4. Photographic recording of the excavation area will be undertaken prior to commencement of excavation.					
Excavation preparation	5. Excavation will be carried out by hand using trowels and/or spades, with hand picks, mattocks or similar hand tools utilised where deposits are too compacted for excavation by trowel or spade.					
	 Brushes, small tools and coal shovels will be used as required to clean up excavations and/or undertake more delicate work. 					
	 All excavated spoil will be collected in labelled buckets and sieved according to excavation unit (square and spit/context). 					
Commence excavation	 Commence excavation with 5 cm salvage pits (spits). However, if an identifiable stratigraphic feature/context is identified during excavation, then excavation will be conducted according to stratigraphic units. 					
	9. Excavation will then proceed by stratigraphic units wherever feasible, with the use of 5 cm spits as a means of exploring new stratigraphic units, including for the purposes of sectioning and/or providing greater vertical control where a stratigraphic unit contains cultural material and is more than 5 cm in depth.					
	 After the first salvage pit in each area, excavation within that area may proceed in 10 cm spits if that is considered suitable for the stratigraphy and artefact distributions encountered. 					
Terminate excavation	 Terminate excavation within a given square when bedrock, clay or other sterile unit indicative of the base of cultural deposits is encountered, or if the excavation becomes unsafe to continue (e.g. presence of hazardous materials or unstable deposits). 					
	12. If there is doubt regarding whether or not the base of cultural deposits has been reached, excavation will continue until at least 20 cm of sterile deposit is encountered.					
	13. All decisions regarding when to terminate excavation in a given grid square will be undertaken in consultation between the archaeologists and the RAPs participating in the fieldwork.					
Ceasing Excavations	14. Excavation will also cease in the event that either of the following occurred:					
Excavations	Discovery of human skeletal remains or suspected human skeletal remains; or					
	 Discovery of non-Aboriginal archaeological relics of local or State significance. If human skeletal remains are discovered, excavation in the area of the finds will halt and the 					
	procedures outlined in <u>Section 6.6</u> (of the HMP) will be followed.					
Discovery non- Aboriginal	 If non-Aboriginal archaeological relics are discovered, excavation in the area of the finds will halt and the Heritage NSW will be notified. 					
archaeological relics	 Excavation will not recommence until advice has been sought from the Heritage Council of NSW and all relevant approvals/permits have been obtained. 					
Minimum salvage quota	17. The minimum salvage quota of ten 1 m x 1 m salvage pits per site will always be completed within a given excavation area, unless the proposed footprint of impacts is less than 10 m ² , in which case the entire area of impacts will be salvaged.					
	18. Decisions regarding when to go beyond the minimum quota will be guided by the results of the excavation.					
	19. Excavation will continue up until a representative sample of the site is achieved, including characterisation and understanding of stratigraphy, site formation processes and composition of cultural material.					

Step	Procedures
Retrieval of a representative sample	 20. Excavation will be terminated within a given excavation area either upon retrieval of a representative sample of the excavation area, or completion of the maximum excavation quota of twenty 1 m x 1 m salvage pits per site. 21. In the event that a representative sample is not recovered after completion of the maximum quota, salvage excavation may exceed the maximum quota.
Triggers for exceeding the maximum salvage quota	 22. Triggers for exceeding the maximum salvage quota include: Artefact density of 10 per m² or greater The presence of rare and/or significant artefacts (eg backed artefacts, ground stone implements, hatchets) Evidence of knapping events Evidence of heat treatment pits Faunal (midden) remains; and/or Evidence of hearths.
Backfilling	 23. All decisions regarding when to terminate excavation in a given excavation area will be undertaken in consultation between the RAPs and the archaeologists participating in the fieldwork. 24. All pits/trenches will be backfilled with the excavated spoil upon completion of the salvage excavation.

2.4 Sieving

All excavated spoil will be sieved with the use of a 5 mm sieve. All suspected artefacts, shell, bone and other cultural material will be bagged according to material type.

Samples of charcoal, gravels or other sieve residue will also be collected where it is deemed that such samples may assist with analysis and interpretation of the excavation.

2.5 Bagging

All finds will be bagged by site, salvage pit, excavation unit (spit/stratigraphic context) and material type. Items recorded in situ will be bagged individually with three dimensional coordinates of their location recorded. Fragile/delicate items will be bagged separately with appropriate inert padding/wrapping as required.

All excavation bags will be labelled with the following information as a minimum:

- Project name
- Date
- Site
- Salvage excavation
- Grid square
- Excavation unit
- Material
- Initials of recorder

Where necessary, advice will be sought from a specialist materials conservator regarding artefact removal, handling, storage, cleaning and stabilisation.

2.6 Recording

Excavation recording will at a minimum comprise the following:

- Detailed site plan
- Excavation recording forms for each grid square
- Photographic log
- Section drawings.

A detailed site plan will be prepared **prior to commencement of excavation**. The plan will be updated throughout the excavation with information regarding progress including which squares are open, which squares are complete, and patterns observed in site stratigraphy, features, and/or finds.

Excavation recording forms will be completed for each $1 \text{ m x } 1 \text{ m salvage pit that is opened up. Details recorded on these forms will at a minimum include the following:$

- Horizontal and vertical extent of each excavation unit
- Deposit descriptions including grain size, colour, texture, compaction, water content, inclusions, evidence of disturbance, nature of boundaries/relationships between deposits
- Finds summary (e.g. number and type of finds)
- Details of any samples collected (e.g. charcoal, sediment, micromorph, gravels)
- Locations, including plans, of in situ finds/features
- Notes on interpretation
- Details of photographs taken prior, during or after excavation
- Details of section drawings.

In addition to the details recorded on excavation forms of all photographs, a log will be kept of all photographs including photographer, camera ID, details of photograph (e.g. salvage pit number(s) / feature(s) / find(s)), date and direction of photograph. Photographs will at a minimum be taken of each excavation area prior to commencement of excavation, upon completion of salvage, and following backfilling. Photographic records for each grid square will include commencement of each excavation unit, completion of excavation, and details of in situ finds and features.

A minimum of one section drawing will be completed for each salvaged site. Additional section drawings will be conducted as necessary to record the complexities of stratigraphy and features within a given excavation area. All section drawings will be done to scale on graph paper and include details of deposit descriptions, the nature of boundaries between deposits, samples taken and other relevant features. Photographs will also be taken of excavation walls to supplement the section drawings.

2.7 Samples

Samples will be collected during excavation for the purposes of characterising deposits, obtaining samples for radiometric dating (e.g. charcoal, wood, bone, shell and/or OSL), reference examples of background materials such as gravels, and environmental and geoarchaeological samples to characterise site stratigraphy and past environments. A minimum of a single representative set of sediment samples will be collected from at least one grid square in each excavation area. Additional samples will be collected as required to characterise individual features/deposits.

All samples will be recorded on the relevant excavation recording form. All samples will be labelled in accordance with the standard protocols for bagging finds.

3 Post excavation analysis

3.1 Storage of finds

All samples collected during excavation will either be analysed in the field or stored during the analysis phase in a locked facility at the premises of the archaeologist undertaking the salvage works. Any changes to the location of the stored materials will not be made without agreement from the RAPs and prior notice to Heritage NSW.

Following the completion of artefact cataloguing and analysis any artefacts recovered during excavations will be curated according to the wishes of Aboriginal stakeholders. This could include reburial in an area outside the zone of proposed works as soon as practicable, or in a secure temporary storage location in accordance with Requirements 16b and 26 in the Code of Practice, pending any agreement reached as to the long-term management of the Aboriginal objects. The RAPs will be involved in identifying a secure temporary storage location. The location of the reburial or the temporary storage location will be submitted to AHIMS with a site update record card for the site(s) in question.

3.2 Artefact analysis

Artefacts collected during excavation may include stone artefacts, flaked glass, and items of European material culture (e.g. nail, glass, ceramics, other metal items). All artefacts will be analysed in accordance with standard archaeological procedures. This may include light brushing to remove excess dirt and/or cleaning with water, depending upon the nature of the item. Digital callipers will be used to measure dimensions to the nearest mm and digital scales will be used to weigh all items to the nearest 0.1 grams. Representative photographs and/or illustrations of individual finds and/or components of the assemblage will be compiled throughout the analysis program.

Following any necessary artefact cleaning, all items will undergo metric recording in accordance with their material and type. Stone artefacts will at a minimum be recorded in accordance with the procedure outlined in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010b). Additional measurements may also be recorded for some items.

The analysis of the stone artefacts and flaked glass, if present, will be undertaken by a specialist archaeologist with experience in stone artefact analysis. All decisions regarding the necessity for additional measurements and recording (e.g. photography and/or illustration) will be made by the stone artefact specialist and will be led by the research questions specific to that site (e.g. material sourcing / use, technology, chronology and artefact use).

- Where possible, RAPs will be invited to participate in the analysis program and training in stone artefact recording and analysis will be made available.
- All items of European material culture will be recorded in accordance with standard archaeological procedures including weight, dimensions, form/shape, completeness, material(s), colour(s), modifications, condition and diagnostic features/marks.
- Where necessary, advice will be sought from a specialist materials conservator regarding artefact handling, storage, cleaning and stabilisation.
- Where necessary, artefact analysis will include the use of a light microscope to inspect material composition and aspects of artefact form/modification.
- Where warranted (i.e. where analysis will assist with answering identified research questions), residue and/or usewear analysis will also be conducted.

3.3 Analysis of samples

Reference samples will be inspected and recorded in accordance with their material type and rationale behind sample collection. For example, samples of sediment/deposit may have pH, Munsell colour, and grain size composition recorded. Samples of background gravels may be photographed and/or described where relevant to analysis of site formation processes or comparison with the stone artefact assemblage.

Samples collected for the purposes of dating (e.g. charcoal, wood, bone, shell, sediment/deposit) will be evaluated, and where viable samples are identified, a representative selection of samples will be sent to a laboratory for processing. Given that radiometric dating is a destructive process, decisions regarding potential samples will be discussed with RAPs during the fieldwork to ensure that the samples selected are culturally appropriate. All samples of charcoal, wood, bone and shell will be photographed, weighed/measured and described prior to being sent for processing.

In the event that stratified deposits or deposits with the potential to further inform the identified research questions are encountered, geoarchaeological techniques such as soil and sediment micromorphology may be employed. Such additional analyses will only be carried out after consultation between archaeologists, RAPs and the proponent.

The primary aim of dating will be to establish the period(s) of site occupation and/or to ascertain the date of specific features, or phases of site formation.

3.4 Reporting

A detailed excavation report will be prepared and submitted to Heritage NSW following completion of all post-excavation analysis. The report will include all details of the fieldwork, descriptions of the results of the excavation (including relevant plans, drawings, photographs, tables and graphs), analysis and discussion of the results (including comparative analysis with relevant sites at local, regional and/or national levels), and details of any ensuing recommendations relating to future decisions regarding management or investigation of the sites.

A plain English version of the report will also be prepared. Both versions of the report will be provided to the RAPs for review and comment prior to being finalised and submitted to Heritage NSW.

APPENDIX E Cultural Heritage artefact tracker / register template

** Avoided (A), Fully impacted (FI), Partially Impacted (PI)

Date / time	No go zone ID or Unexpected find	Impact **: A / FI / PI	Area of impact if FI or PI (m²)	GPS Coordinates	Reason for FI or PI	Consultation undertaken with Neoen and RAPs (Y/N)	Surface collection or excavation undertaken (Y/N)	Were artefacts found (Y/N)	Comment on artefact management (ie repatriated, salvaged and stored)