

CSR Advanced Manufacturing Hub

Heritage Management Plan

Report to CSR Limited

2021



 artefact

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1.0 INTRODUCTION

In October 2016, CSR Building Products Limited (CSR) acquired Boral Bricks Pty Limited (Boral) brick business along the eastern seaboard of Australia and with it, the Badgerys Creek Brick Making Facility Site. Project Approval (PA10_0014) was given for the existing site under section 75W of the *Environmental Planning and Assessment Act 1979* and previous archaeological investigations were conducted by AECOM (2010) as part of that approval. CSR proposed to expand the site. The final approved project, inclusive of MOD 3 and MOD 4 is referred to by the Department of Planning Industry and Environment (DPIE) as the Preferred Project. Scope of this project is defined as:

- Expansion of brick making facility
- Quarrying activities in Pit 3
- Dewatering of Pit 1,2 and 3
- VENM site rehabilitation of Pits 1,2 and 3

This scope is reduced from that previously assessed by Artefact Heritage, and this report has adjusted recommendations accordingly.

On 10 August 2020 the DPIE approved these modifications, subject to changes to existing conditions of approval. These updated conditions are provided in Table 1 below. These conditions of approval include the preparation of a Heritage Management Plan (HMP) (this report).

Artefact Heritage provided a combined Archaeological Technical Report (ATER) for MOD3 and MOD4¹ and provided separate Aboriginal Cultural Heritage Assessment Reports (ACHAR) for MOD3 and MOD4.²³ This HMP provides management measures for both MOD3 and MOD4 in accordance with recommendations of both ACHARs. Parts of the MOD3 proposal area had already been subject to assessment and archaeological salvage by AECOM in 2010. The two ACHARs provided by Artefact Heritage in 2019 did not assess the area already managed by AECOM and this HMP therefore does not address historical approval conditions that were directed to AECOM findings and which have remained in the conditions of approval.

This HMP describes how heritage management and mitigation measures will be implemented prior to and during the Project's construction and operation and documents how the conditions of the Development Consent and the requirements of the ACHAR have and will be met.

Following the Secretary's approval, the Applicant must implement the HMP. Table 1 identifies where each requirement is addressed in this plan.

Table 1: Condition of consent requirements

Condition requirement	Where addressed in this document
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Development Consent Schedule 3 Aboriginal Heritage

¹ Artefact Heritage February 2019. CSR Advanced Manufacturing Hub. (Mod 3 & Mod 4) –Archaeological Technical Report. Report to CSR Building Products Limited.

² Artefact Heritage January 2019. CSR Advanced Manufacturing Hub. Mod 4 – Aboriginal Cultural Heritage Assessment Report. Report to CSR Building Products Limited.

³ Artefact Heritage February 2019. CSR Advanced Manufacturing Hub. Mod 3 – Aboriginal Cultural Heritage Assessment Report. Report to CSR Building Products Limited.

Condition requirement	Where addressed in this document
<p>Condition 29 The Proponent must ensure that:</p> <p>(a) archaeological salvage of site BC-01-09 is undertaken in accordance with Recommendation 1, Section 6.0 of the Aboriginal Heritage Assessment – Addendum in the EA;</p>	<p>This is a historical recommendation which relates to land and an artefact assessed and managed under AECOM 2010. Salvage has been completed</p>
<p>(b) regeneration works, dewatering activities and water discharges in the area of the archaeological deposit identified adjacent to Badgerys Creek (see Appendix 5) are either avoided, or else undertaken in a manner that will minimise harm to Aboriginal objects, to the satisfaction of the Secretary; and</p>	<p>This is a historical recommendation which relates to land assessed and managed under AECOM 2010. The current report does not assess land adjacent to Badgerys Creek.</p>
<p>(c) measures are implemented prior to the commencement of Phase 1, to conserve and protect the hearth feature within site BCBW18 AS 02 02 (AHIMS ID 45-5-5164).</p>	<p>These measures are detailed in Section 6.1.1.2 of this report</p>
<p>Condition 30 Heritage Management Plan The Proponent must prepare an Aboriginal Heritage Management Plan for the project to the satisfaction of the Secretary. The plan must:</p> <p>(a) be prepared by suitably qualified and experienced persons;</p>	<p>Section 1.3</p>
<p>(b) be prepared in consultation with Registered Aboriginal Parties and Heritage NSW;</p>	<p>Section 2.2 provides RAP comments on the HMP Section 2.4 Provides Heritage NSW comments on the HMP</p>
<p>(c) be submitted to the Secretary for approval within 6 months of the determination of Modification 3 and 4, unless otherwise agreed by the Secretary;</p>	<p>DPIE has granted an extension to this lodgement date.</p>
<p>(d) include a description of the measures that would be implemented to:</p> <p>(i) protect, monitor and manage identified Aboriginal objects and Aboriginal places on the site (including any proposed archaeological investigations and salvage measures), including specific measures to ensure that the archaeological deposit adjacent to Badgerys Creek (see Appendix 5) is not impacted during regeneration operations;</p>	<p>Only one identified Aboriginal object requiring salvage remains on the site. This is Isolated Artefact BCBW18 IF 01 (AHIMS ID 45-5-5165) which is to be collected prior to impacts as stipulated in Section 6.1.1.3 No further investigations or salvage are currently proposed. The reference to 'archaeological deposit adjacent to Badgerys Creek' is a historical recommendation which relates to land assessed and managed under AECOM 2010.</p>
<p>(ii) conserve the entire extent of the hearth feature within site BCBW18 AS 02 (AHIMS ID 45-5-5164);</p>	<p>These measures are detailed in Section 6.1.1.2 of this report</p>
<p>(iii) manage the discovery of previously unidentified Aboriginal objects or Aboriginal places on the site; and</p>	<p>All staff involved in construction of the project will undergo heritage induction as detailed in Section 6.1.1.1, Section 6.2.1 Table 1 and Appendix 1</p>

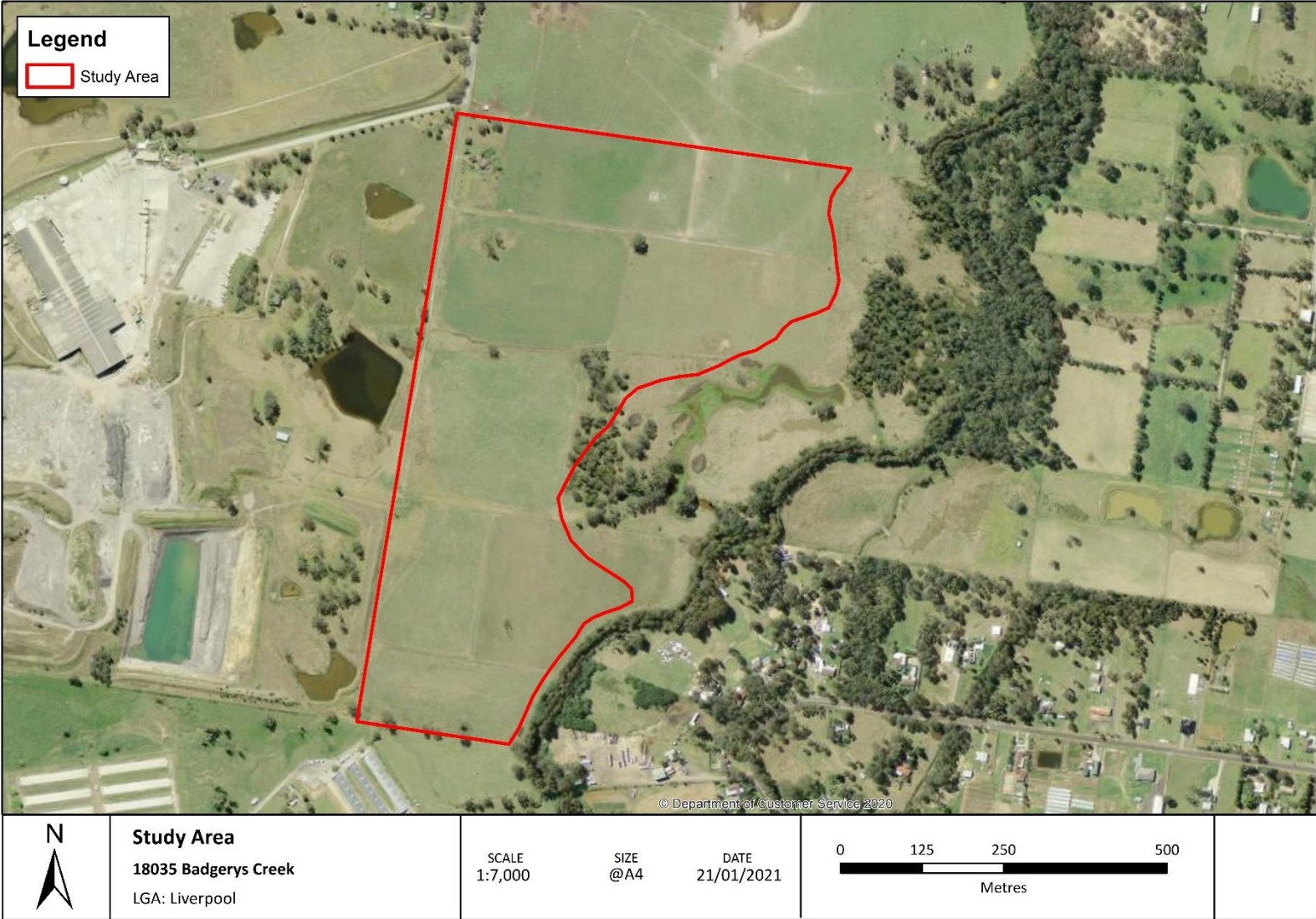
Condition requirement	Where addressed in this document
(iv) facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site; and	Sections 2.3, , 6.1.1.2, 6.1.1.3, 6.1.1.4, 6.1.1.5, 6.1.3
(e) include a protocol to be implemented in the event that skeletal remains are discovered during the project	Section 6.2.3 of this report
<p>Condition 33 Work in the immediate vicinity of a site identified in condition 32 of this Schedule may only recommence if.</p>	
(a) the object or place is confirmed by Heritage NSW upon consultation with the Registered Aboriginal Parties not to be an Aboriginal object or Aboriginal Place;	Appendix 1, Section 6.2.2
(b) the Aboriginal Cultural Heritage Management Plan is revised to include the object or place and appropriate measures in respect of it; or	Section 6.2.4
(c) the Secretary is satisfied with the measures to be implemented in respect of the object or place and makes a written direction in that regard.	Appendix 1

1.1 Location

The study area is located on land at 235 Martin Road in the suburb of Badgerys Creek in the City of Liverpool Local Government Area (LGA). The study area is approximately 41 kilometres (km) west of the Sydney Central Business District. The land is adjacent to the existing Badgerys Creek Quarry and Brickmaking Facility which is currently non-operational. The study area is shown in Figure 1, and comprises parts or all of the following lots:

- Lot 1 DP981161
- Lot 1 DP373863
- Lot 54 DP3050
- Lot 55 DP3050
- Lot 56 DP3050
- Lot 57 DP3050
- Lot 58 DP3050

Figure 1: Study area location



Document Path: D:\GIS\GIS_Mapping\18035_Badgerys_Creek\MXD\210121\Project_Framework_Study_Area.mxd

1.2 The Proponent

The proponent for the Project is CSR Building Products Limited.

1.3 Authorship

This management plan has been written by Michael Lever (Heritage Consultant, Artefact Heritage). Michael has a Bachelors degree in Archaeology from the University of Sydney, Honours in Archaeology from La Trobe University (1st) and is a current PhD candidate at the University of Sydney. He has ten years' experience in consulting archaeology in Victoria and NSW.

1.4 Heritage approvals

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

Part 3A of the EP&A Act was repealed by the *Environmental Planning and Assessment Amendment (Part 3A Repeal) Act 2011* (Part 3A Repeal Act), which commenced on 1 October 2011. Under the Part 3A Repeal Act, projects deemed to be 'transitional Part 3A projects will continue to be subject to Part 3A of the EP&A Act (as in force immediately before the repeal and as modified by the Part 3A Repeal Act). Transitional Part 3A projects include certain projects that were the subject of an existing approval under Part 3A.

As the Badgerys Creek Quarry and Brick Making Facility has a Project Approval that was granted under Part 3A of the EP&A Act, it is a transitional Part 3A project. The provisions of Part 3A (as in force immediately prior to its repeal) continue to be applicable to the project. The project was therefore assessed under s75W of the repealed Part 3A.

The transitional arrangements in the EP&A Act were repealed by the Environmental Planning and assessment Bill 2017. This moved transitional Part 3A projects to the current State significant development and State significant infrastructure pathways, and applications to modify such projects will no longer be made under Section 75W. The project modification applications have been made within the transitional timeframe and are not affected by the above arrangements.

An ATR and two ACHARs were prepared for the project in accordance with the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (Heritage NSW [former OEH] 2010a).

The ACHARs included:

- Comprehensive Aboriginal stakeholder consultation in accordance with the requirements of Aboriginal Cultural Heritage Consultation Requirements for Proponents (Heritage NSW [former OEH] 2010b)
- An assessment of Aboriginal cultural heritage values and the significance of the potential archaeological deposit
- Survey of the study area
- Test excavation of the study area
- An assessment of the potential harm to Aboriginal cultural heritage values due to the Project
- Recommendations for mitigation and management of harm to Aboriginal cultural heritage values due to the Project

1.5 Purpose and objectives

1.5.1 Purpose

The purpose of this plan is to describe how Aboriginal heritage will be protected and managed during construction and operation of the project.

1.5.2 Objectives

The objective of the HMP is to ensure that impacts to Aboriginal heritage are minimised and limited to the scope permitted by the planning approval for the project. To achieve this the following will be undertaken:

- Ensure mitigation measures related to the salvage and reburial of Aboriginal heritage are implemented prior to impacts.
- Ensure management measures relating to the protection of identified Aboriginal heritage are implemented prior to impacts
- Ensure appropriate measures are implemented to comply with the Conditions of Consent and ACHAR.

2.0 CONSULTATION AND STAKEHOLDER ENGAGEMENT

2.1 Registered Aboriginal Parties

Consultation with Registered Aboriginal Parties (RAPs) was undertaken as one process for the preparation of both ACHAR for the project in accordance with Heritage NSW's guidelines 'Aboriginal cultural heritage consultation requirements for proponents' (2010).

In accordance with Step 4.1.2 of the Consultation Requirements, Artefact Heritage corresponded with the following organisations by letter and email on the 6 June 2018 requesting the details of Aboriginal people who may hold cultural knowledge relevant to determining the Aboriginal significance of Aboriginal objects and/or places within the local area:

- Greater Sydney Local Land Services
- Liverpool City Council
- Native Title Service Corporation
- Gandangara LALC
- Office of Environment and Heritage – Parramatta Office
- National Native Title Tribunal
- Office of the Registrar, *Aboriginal Land Rights Act 1983*

In addition to this, and in accordance with Step 4.1.3 of the Consultation Requirements, an advertisement was placed in Liverpool City Champion Advertisement on the 13 June 2018, inviting the participation of Aboriginal people who may hold cultural knowledge relevant to determining the Aboriginal significance of Aboriginal objects and/or places within the local area.

As a result of that process 19 groups and individuals registered their interest (Table 2). A copy of the proposed assessment methodology was sent to registered Aboriginal parties (RAPs) by email and post on 9 July 2018, requesting comments by 6 August 2018. At the end of this period, Five RAPs had responded, supporting the methodology.

Table 2: List of Registered Aboriginal Parties

Contact	Organisation
Jody Kulakowski	Barking Owl Aboriginal Corporation
Lee Field	Barraby Cultural Services
Seli Storer	Biamanga
Glenda Chalker	Cubbitch Barta Native Title Claimants Aboriginal Corporation

Contact	Organisation
Corey Smith	Cullendulla
Celestine Everingham	Darug Aboriginal Cultural Heritage Assessments
Des Dyer	Darug Aboriginal Land Care
Justine Coplin	Darug Custodian Aboriginal Corporation
Anna O'Hara	Darug Land Observations
Paul Boyd and Lilly Carroll	Didge Ngunawal Clan
Basil Smith	Goobah
Wendy Smith	Gulaga
Wendy Morgan	Guntawang Aboriginal Resources Incorporated
Phil Khan	Kamilaroi-Yankuntjatjara Working Group
Roxanne Smith	Murramarang
Scott Franks	Tocomwall
Philip Boney	Wailwan Aboriginal Digging Group
Bo Field	Yurrandaali Cultural Services
Arika Jalomaki	Yulay Cultural Services

Table 3: Summary of RAP comments

Organisation	Summary of Comments
Kamilaroi Yankuntjatjara Working Group	Supports the recommendations of the reports

Organisation	Summary of Comments
Darug Custodian Aboriginal Corporation	Supports the recommendations of the reports. The identified sites are part of a complex of significant sites.
Darug Aboriginal Land Care	Supports the recommendations of the reports. Native plants should be used in the landscape.
Darug Land Observations	Supports the recommendations of the reports

2.2 RAP comments on the HMP

On 22 January 2021 a copy of the ATR and ACHAR was forwarded by email to RAPs for a 28-day review. The ATR and ACHAR were provided by mail to two RAPs. To allow for physical mail time, and to offset for the public holiday on 26 January 2021, the review period was extended to 26 February 2021 (35 days). By the end of the review period four groups had provided comment, see Table 3 for a summary of the RAP comments, and how these comments have been incorporated to this report.

Table 4: RAP comments on HMP and how addressed in this document

RAP	Method & date	Comment	How addressed in HMP
Basil Smith: Goobah	Email: 29/1/2021	235 Martin Road, Badgerys Creek HMP, I have reviewed and support the development, please keep me informed on any further developments	Provision of ongoing information to RAPs regarding further developments are contained in Section 6.1.1.5. This stipulates that RAPs must be consulted with regarding appropriate methods of artefact reburial and also given the opportunity to participate in collection and reburial of
Not stated: Biamanga	Email: 9/2/2021	This is to confirm that we support the following Heritage Management Plan (HMP) at 235 Martin Road, Badgerys Creek please keep us informed on any further developments	Provision of ongoing information to RAPs regarding further developments are contained in Section 6.1.1.5. This stipulates that RAPs must be consulted with regarding appropriate methods of artefact reburial and also given the opportunity to participate in collection and reburial of
Kadibulla Khan: Kamilaroi-Yankuntjatjara Working Group	Email: 12/2/2021	Thank you for your report for 235 Martin Rd, Badgerys Creek. We support your report and look forward to salvaging this site. If Artefacts are found they I recommend they are housed at the Local Aboriginal Land Council.	It is the current recommendation of this report (Section 6.1.1.4) that artefacts already salvaged from this site, and the artefact yet to be salvaged (Artefact BCBW18 IF 01 AHIMS ID 45-5-5165) should be reburied at an identified location. This is supported by the majority of RAP respondents.

2.3 Ongoing RAP consultation

In accordance with the recommendations of the ACHAR, consultation and cooperation with the RAPs listed in Table 2 is required for the proposed reburial program for artefacts resulting from test excavation and proposed surface salvage. RAP consultation would also be required in the event of any changes to the proposed management of the hearth feature portion of site BCBW18 AS 02 (AHIMS ID 45-5-5164).

2.4 Review of HMP by Heritage NSW, Department of Premier and Cabinet

The HMP was provided to Heritage NSW for review on 22 January 2021 via the Heritage Mailbox (heritagemailbox@environment.nsw.gov.au). As of 26 February 2021, no response had been received to the HMP from Heritage NSW.

2.5 Review of HMP by DPIE

A Request for Information was issued by DPIE on 4 March 2021. This, with Artefact responses, is reproduced in Appendix 4. Changes requested have been incorporated to the current report version.

3.0 LEGISLATIVE REQUIREMENTS

3.1 Legislation

This HMP has been prepared in accordance with the relevant legislative requirements, policies and procedural guidelines applicable to Aboriginal and non-Aboriginal heritage and its protection in New South Wales. These are summarised in Table 6 below:

Table 5: Summary of relevant legislation

Legislation	Description	Implication for this HMP
<i>Environmental Planning and Assessment Act 1979</i>	This Act establishes a system of environmental planning and assessment of development projects for the State.	Project approval conditions and obligations have been incorporated into the current HMP.
<i>National Parks and Wildlife Act 1974</i>	<p>The NPW Act provides statutory protection to all Aboriginal places and 'objects'.</p> <p>In order to undertake a proposed activity which is likely to involve harm to an Aboriginal place or object, it is necessary to obtain an Aboriginal Heritage Impact Permit (AHIP), to be issued under Section 90 of the NPW Act.</p>	<p>Impacts to Aboriginal heritage items have been identified for the Project.</p> <p>Aboriginal heritage items to be directly impacted by the Project will be reburied in consultation and cooperation with RAPs.</p> <p>The Project has been assessed as a transitional approval under Section 75W, Part 3A EPA. An AHIP is not required for harm to Aboriginal places resulting from such approved projects.</p> <p>Aboriginal heritage items not salvaged will be protected from unintended impacts.</p> <p>Management of Aboriginal heritage is outlined in Section □ of this plan.</p>
<i>Aboriginal Land Rights Act 1983</i>	<p><i>The Aboriginal Land Rights Act 1983</i> is administered by the NSW Department of Human Services -Aboriginal Affairs. This Act established Aboriginal Land Councils (at State and Local levels). These bodies have a statutory obligation under the Act to;</p> <p>(a) take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law, and</p> <p>(b) promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area.</p> <p>The study area is within the boundary of the Gandangara LALC.</p>	<p>The study area is not subject to a claim under the <i>Aboriginal Land Rights Act 1983</i>. No specific implications for this HMP.</p>
<i>Native Title Act 1994</i>	<p>The <i>Native Title (New South Wales) Act 1994</i> was introduced to work in conjunction with the Commonwealth <i>Native Title Act 1993</i>. Native Title claims, registers and Indigenous Land Use Agreements are administered under the Act.</p>	<p>One undetermined registered Native Title claim has been identified for the study area.</p> <p>This is NC2017/003 South Coast People, lodged 3 August 2017, accepted for registration 31 January 2018</p>

3.2 Guidelines

Several guidelines and standards relating to the management of Aboriginal and historic cultural heritage have been used as part of the assessment process. These include:

- Code of Practice for the archaeological investigation of Aboriginal objects in NSW (Heritage NSW [former OEH] 2010)
- Aboriginal cultural heritage consultation requirements for proponents 2010 (Heritage NSW [former OEH] 2010)
- Guide to investigating, assessing, and reporting on Aboriginal cultural heritage in NSW (Heritage NSW [former OEH] 2010)

4.0 EXISTING ENVIRONMENT

The existing environment and heritage context of the Project has been subject to assessment in the following background reports prepared to support the Project's Environmental Impact Statement (EIS):

- AECOM 2010. Boral Badgerys Creek. Boral Bricks Aboriginal Heritage Impact Assessment.
- Artefact Heritage February 2019. CSR Advanced Manufacturing Hub. (Mod 3 & Mod 4) – Archaeological Technical Report. Report to CSR Building Products Limited.
- Artefact Heritage January 2019. CSR Advanced Manufacturing Hub. Mod 4 – Aboriginal Cultural Heritage Assessment Report. Report to CSR Building Products Limited.
- Artefact Heritage February 2019. CSR Advanced Manufacturing Hub. Mod 3 – Aboriginal Cultural Heritage Assessment Report. Report to CSR Building Products Limited.

4.1 Aboriginal heritage

4.1.1 Aboriginal archaeological resource

The identification of correct Country for a given area is often difficult, given the rapid and huge impact of disease and violent dispossession on Aboriginal people in the Sydney region. A frequently used indication of country is language identity, however far more complex factors are known to have often taken precedence over language in determining Aboriginal people's definition of Country.⁴ The study area is located near the boundaries of two Aboriginal language groups, the Dharawal people and Gundungurra people (Tindale 1974). The Dharawal people are placed by Tindale in the area from the south side of Botany Bay and Port Hacking to north of the Shoalhaven River and inland to Campbelltown, Camden and Bargo. They are thought to have ranged further north into the Liverpool region. The Gundungurra people are described as occupying the southern rim of the Cumberland Plain, west of the Georges River, including a boundary area with the Dharawal people in the Camden and Bargo locality.

The study area is located within the Cumberland Plain between Badgerys Creek to the west and South Creek to its east. The Cumberland Plain is a major geological sunken hinterland extending from the elevated coastal sandstone formations at the Sydney Coast in the east, to the Nepean-Hawkesbury River in the west. It is characterised by level or mildly undulating plains with occasional rocky outcrops, and its soils have formed through millennia of flooding episodes and deposition of silts, often to significant depth in the South Creek soil formation named after the creek adjacent to the study area. The oldest evidence of human occupation in the vicinity of the study area comes from Cranebrook Terrace, located 20 km north west of the study area (Attenbrow 2010: 18-20). Cranebrook Terrace has been dated to 41,700 years Before Present (BP) (ANU-4016).

The western portion of the study area is comprised of the Blacktown Residual Soil Landscape which has shallow to moderately deep, hard setting mottled texture contrast soils. The eastern portion of the study area comprises the South Creek Soil Landscape, an alluvial environment characterised by floodplains, valley flats and drainage depressions. The study area incorporates two landform elements including a hill crest, and slope. The north western portion is the highest location within the study area, it forms part of the low undulating hill crests between the two major water courses. From this point, the study area generally slopes in a south easterly direction towards South Creek.

⁴ Stanner, W.E.H. 1965. Aboriginal Territorial Organization: Estate, Range, Domain and Regime. *Oceania*. 36, No 1, pp 1-26

4.2 Previously Registered Aboriginal sites

The location of Aboriginal sites is considered culturally sensitive information. It is advised that this information, including the AHIMS data appearing on the heritage map for the proposal, be removed from this report if it is to enter the public domain.

An extensive search of the Aboriginal Heritage Information Management System (AHIMS) database was undertaken on the 5 March 2018 for sites registered within the following coordinates:

GDA 1994 MGA 56	292250 -- 294250 E
	6245998 -- 6247998 N
Buffer	1000 m
Number of sites	30
AHIMS Search ID	331827

The distribution of recorded sites within the AHIMS search area is shown in Table 6. The search located 30 registered sites within the vicinity of the study area, and no sites within the study area.

The frequency of recorded site types is summarised in below.

Table 6: Site frequencies in extended search

Site Feature	Frequency	Per cent
Artefact	27	90
Modified Tree (Carved or Scarred)	2	6.6
Art (Pigment or Engraved)	1	3.33
Total	30	100

4.3 Site Survey

Archaeological survey was conducted on 20 August 2018.

One new archaeological site, Badgerys Creek Brick Works 18 Isolated Find (BCBW18 IF) 01 (AHIMS ID 45-5-5165) was identified during the survey. The survey resulted in the confirmation that the entirety of the study area was of moderate archaeological potential.

4.4 Archaeological Test Excavation

The test excavation program was carried out across five days from the 20 August to 24 August 2018. Test excavation was directed by Vanessa Edmonds (Principal, Artefact Heritage), supervised by Julia McLachlan (Heritage Consultant, Artefact Heritage) and Ryan Taddeucci (Senior Heritage Consultant, Artefact Heritage).

4.5 Test Excavation Sampling strategy

The aim of the sampling strategy was to test the various landforms within the study area to produce predictive statements regarding the likely archaeological sensitivity and potential across the study area that would facilitate management and mitigation measures related to Aboriginal cultural heritage.

Previous archaeological investigation in the area had identified Aboriginal cultural material in close proximity to the creek line, both Badgerys Creek (AECOM 2010) and South Creek (Haglund 1978). Landform observations, predictive models and comments made by the RAPs during the survey were used to inform the locations of the testing program. A total of eight, east-west oriented transects were placed to sample the study area at various distances and elevations from South Creek and in response to observations on ground and RAP recommendations.

4.6 Test Excavation Results

Three new artefact scatters were identified:

- BCBW18 AS 01 (AHIMS ID 45-5-5162) (two stone artefacts)
- BCBW18 AS 02 (AHIMS ID 45-5-5164) (21 stone artefacts and a clay hearth)
- BCBW18 AS 03 (AHIMS ID 45-5-5163) (nine stone artefacts)

Figure 2: Location of newly identified sites in the study area



4.7 Archaeological significance assessment

The archaeological test excavation program within the study area identified four new sites. Assessment of the scientific significance of the artefact site locations considers the following aspects of the test excavation results:

- a) Presence of a variety of artefact types and raw material types
- b) Potential for artefact assemblages to answer questions about raw material sourcing and site use
- c) The portions of the study area that have been tested have been assessed to have moderate archaeological sensitivity
- d) Landforms with steep gradients are unlikely to yield artefacts
- e) The remainder of the site showed a low-density scatter across the study area with isolated areas of concentrated artefact densities

A summary of the archaeological significance of sites identified during survey and test excavation is presented in Table 7.

Table 7: Archaeological significance grading

Site name (AHIMS ID)	Research potential	Representativeness	Rarity	Education potential	Overall significance assessment
BCBW18 AS 01 (AHIMS ID 45-5-5162)	Low	Low	Low	Low	Low
BCBW18 AS 02 (AHIMS ID 45-5-5164)	High	Moderate	High	High	High
BCBW18 AS 03 (AHIMS ID 45-5-5163)	Low	Low	Low	Low	Low
BCBW18 IF 01 (AHIMS ID 45-5-5165)	Low	Low	Low	Low	Low

5.0 IMPACTS AND RISKS

5.1 Aboriginal archaeological impact assessment

Aboriginal archaeological sites have been identified in the study area consisting of one isolated surface artefact (BCBW18 IF 01 - AHIMS ID 45-5-5165). This artefact is still in situ.

Additionally, 32 artefacts were collected from archaeological test excavations in BCBW18 AS 02 (AHIMS ID 45-5-5164) and BCBW18 AS 03 (AHIMS ID 45-5-5163). The extent of site BCBW18 AS 02 (AHIMS ID 45-5-5164) has been tested but is largely unexcavated and it can be assumed that Aboriginal artefactual material is present within it.

A clay hearth was identified within the site extent of BCBW18 AS 02 (AHIMS ID 45-5-5164). This feature is still in situ.

Potential impacts to Aboriginal archaeological resources during the construction and operation phase of the Project are summarised below.

1. Construction of the Preferred Project

- Works associated with the Preferred Project have potential to impact the isolated artefact site (BCBW18 IF 01 - AHIMS ID 45-5-5165).

Such works may include but are not limited to:

- expansion of brick making facility
- quarrying activities in Pit 3
- dewatering of Pit 1,2 and 3
- VENM site rehabilitation of Pits 1,2 and 3
- Tracked or wheeled vehicular access to the location
- Transport and delivery of construction materials
- Site preparation including devegetation and surface grading
- Introduction of subsurface utilities and services

6.0 MANAGEMENT MEASURES

This section describes the overall approach associated with the management and mitigation of Aboriginal cultural heritage throughout the lifetime of the Project. The following management measures are based on the following project approval documents:

- Minister of Planning and Infrastructure Project Approval Application Number 10_0014 issued 2011, modified May 2018, second modification August 2020.
- Artefact Heritage February 2019. CSR Advanced Manufacturing Hub. (Mod 3 & Mod 4) – Archaeological Technical Report. Report to CSR Building Products Limited.
- Artefact Heritage January 2019. CSR Advanced Manufacturing Hub. Mod 4 – Aboriginal Cultural Heritage Assessment Report. Report to CSR Building Products Limited.
- Artefact Heritage February 2019. CSR Advanced Manufacturing Hub. Mod 3 – Aboriginal Cultural Heritage Assessment Report. Report to CSR Building Products Limited.

6.1 Specific management measures

Four Aboriginal archaeological sites were identified in the study area:

- BCBW18 AS 01 (AHIMS ID 45-5-5162)
- BCBW18 AS 02 (AHIMS ID 45-5-5164) containing a heat retainer hearth feature. This hearth site type is considered rare and of high research potential.
- BCBW18 AS 03 (AHIMS ID 45-5-5163)
- BCBW18 IF 01 (AHIMS ID 45-5-5165)

The following sections detail measures required to prevent damage to these sites through construction of the Project, with reference to the risks identified in Section 4.7.

6.1.1 Prior to commencement of works

6.1.1.1 Heritage induction

- Prior to the commencement of ground disturbing works, all staff must receive induction as to the location of the heat retainer hearth feature in BCBW18 AS 02 (AHIMS ID 45-5-5164), on the identification of potential Aboriginal cultural heritage items and protocols to be followed in the event that Aboriginal cultural heritage items or skeletal remains are identified. Details of heritage induction are provided in Appendix 1.

6.1.1.2 Protection of heat retainer hearth feature in BCBW18 AS 02 (AHIMS ID 45-5-5164)

- Prior to commencement of ground disturbing works permanent and robust barriers must be placed around a 10m buffer measured from the outer edge of the heat retainer hearth feature in BCBW18 AS 02 (AHIMS ID 45-5-5164) (see Figure 3). This barrier must be of a strength sufficient to withstand potential impacts associated with the construction and ongoing operation of the CSR Advanced Manufacturing Hub and also of sufficient height to prevent incursion. This barrier could comprise concrete bollards with a superstructure of steel fencing.

- The 10m buffer zone must be marked as a NO GO ZONE on site plans and on permanent signs attached to the buffer zone fencing.
- Entry to the NO GO ZONE must be restricted to staff who have undergone heritage induction and must be limited to entry for the purposes of site maintenance such as above-surface bushfire hazard reduction. This does not permit activities likely to disturb the ground surface such as stump or root removal.

6.1.1.3 Artefact collection BCBW18 IF 01 (AHIMS ID 45-5-5165)

- Prior to commencement of ground disturbing works arrangements must be made and carried out for the collection of Isolated Artefact BCBW18 IF 01 (AHIMS ID 45-5-5165). This must be carried out in conjunction with RAPs.
- A qualified heritage professional will attend site with RAPs to locate Isolated Artefact BCBW18 IF 01 (AHIMS ID 45-5-5165).
- It is proposed that collection of Isolated Artefact BCBW18 IF 01 (AHIMS ID 45-5-5165) should take place immediately prior to (on the same day) as reburial of other artefacts that were retrieved as a result of archaeological test excavation.

6.1.1.4 Reburial of stone artefacts

- Isolated Artefact BCBW18 IF 01 (AHIMS ID 45-5-5165) and any other artefacts that may be collected in the process of salvaging BCBW18 IF 01 (AHIMS ID 45-5-5165) must be reburied together with the stone artefacts that were retrieved as a result of archaeological test excavation.
- The location and manner of reburial of artefacts must be agreed upon in advance with RAPs.
- The location of reburial must be protected from disturbance.
- It is proposed that a suitable location for reburial would be within the 10 m protection buffer proposed to be set around the heat retainer hearth feature within site BCBW18 AS 02 (AHIMS ID 45-5-5164).

It is important that consideration be given to RAP opinions on aspects of reburial including:

- Location of reburial
- Nature of reburial container, if any
- Appropriate ceremony to be associated with reburial
- The nature (if any) of markers above the location of the reburial
- Suitable protective measures to prevent inadvertent excavation of the reburial

Figure 3: Location of heat retainer hearth feature (enlarged) and 10m buffer in BCBW18 AS 02 (AHIMS ID 45-5-5164)



Document Path: D:\GIS\GIS_Mapping\20262_235_Martin_Road\MXD\HMP_10m_Buffer_20210114.mxd

6.1.1.5 Consultation

Registered Aboriginal Parties identified in Table 2 must be provided the opportunity to consult on reburial methodology and to participate in collection and

A record of all correspondence with RAPs must be maintained by appropriate levels of Project management as identified in Table 8 of this report.

6.1.2 Changes to development footprint

If changes are made to the development footprint within the NO GO ZONE of the heat retainer hearth feature in BCBW18 AS 02 (AHIMS ID 45-5-5164), further archaeological assessment will be required.

6.1.3 At decommissioning of the project

At the conclusion of the operation of the Project and prior to decommissioning or to changes in land use, the suitability of the NO GO ZONE around the heat retainer hearth in feature BCBW18 AS 02 (AHIMS ID 45-5-5164) must be reassessed through consultation with heritage specialists and RAPs identified through an updated consultation process.

6.2 General Heritage Management

6.2.1 Heritage induction

Heritage induction training would be most appropriately provided by the Gandangara LALC. All staff working onsite during construction phases of the Project must undergo cultural heritage training prior to commencing work on site. This may be carried out in a tiered manner, with team leaders and site managers receiving heritage induction directly from Aboriginal representatives such as Gandangara LALC, and other staff receiving heritage induction from team leaders and site managers. Records of heritage induction must include electronic copy both stored onsite and backed up to an offsite facility. Training records including electronic and physical records of induction must be kept in the office of the site manager, and electronic copy must be provided to the Gandangara LALC.

6.2.2 Unexpected finds

If at any time previously unidentified Aboriginal or historical heritage items are detected, the Unexpected Finds procedure provided in Appendix 1 of this document must be followed. This procedure sets out case specific procedural guidelines for recording and reporting on potential finds.

6.2.3 Aboriginal ancestral remains

If at any time Aboriginal ancestral remains (or any human remains) are identified, all works must cease in the vicinity of the remains and immediate surrounds (10m), the remains must be covered from view, secured from unauthorised trespass. NSW Police and Heritage NSW must be notified immediately. If the remains are determined by NSW Police to be Aboriginal ancestral remains, Gandangara LALC must be informed. The mode of exhumation and repatriation of Aboriginal ancestral remains is to be as determined by the Gandangara LALC and by Aboriginal people with connection to local country.

If the Gandangara LALC and Aboriginal people with connection to local country are of the opinion that study of these ancestral remains or their archaeological context is desirable then an archaeological program must be formulated for this purpose under their oversight. This may include forensic and osteological investigatory methods as deemed culturally appropriate by the Gandangara LALC and by Aboriginal people with connection to local country.

6.2.4 Review and revision of this plan

In the event that Aboriginal objects, an Aboriginal Place or Aboriginal ancestral remains are identified at any time during the operation or decommissioning of the Project, this HMP must be reviewed. Work in the immediate vicinity of the find may only recommence once the Secretary approves in writing the measures proposed for management of these Aboriginal objects, Aboriginal Place or Aboriginal ancestral remains, and the revised HMP.

7.0 ROLES AND RESPONSIBILITIES

Responsibility for the implementation of the management measures outlined in Section 6.0 are presented in Table 9.

All personnel are responsible for ensuring heritage items are protected and managed in accordance with the current HMP.

Failure to report discovery or damage or destruction resulting from unauthorised removal or alteration to a site of an archaeological object may be prosecuted under the *NP&W Act* and/or *Heritage Act*.

Table 8: Summary of roles and responsibilities

Roles	Responsibilities
CSR	<ul style="list-style-type: none"> • Ensure HMP adequately addresses heritage compliance. • Ensure heritage incidents are escalated to the relevant authorities.
CSR Project Managers	<ul style="list-style-type: none"> • Allocate sufficient resources for the implementation of this HMP. • Oversee the overall implementation of this HMP including the implementation of heritage training and the creation and maintenance of heritage training records • Oversee and coordinate scheduled RAP communications • Ensure all relevant personnel have and understand the most up-to-date copy of this HMP. • Ensure that any required actions arising from the detection of unexpected heritage items or human remains are reported to the relevant personnel for further action and ensure that the actions are effectively implemented.
Site supervisors/ Site foreman/ contractors/subcontractors	<ul style="list-style-type: none"> • Undertake Aboriginal heritage induction training, including unexpected finds procedures and induct workers under their supervision • Maintain records of induction • Understand and implement mitigation protocols as required in the HMP and any other required measures during construction. • All personnel are responsible for ensuring that heritage items to be retained are protected.
Qualified heritage professional (archaeologist)	<ul style="list-style-type: none"> • The archaeologist will be responsible for providing advice to minimise potential impacts to any Aboriginal or historic heritage values that may be encountered during construction activities.

8.0 REFERENCES

AECOM 2010. Boral Badgerys Creek. Boral Bricks Aboriginal Heritage Impact Assessment.

Artefact Heritage February 2019. CSR Advanced Manufacturing Hub. (Mod 3 & Mod 4) –Archaeological Technical Report. Report to CSR Building Products Limited.

Artefact Heritage January 2019. CSR Advanced Manufacturing Hub. Mod 4 – Aboriginal Cultural Heritage Assessment Report. Report to CSR Building Products Limited.

Artefact Heritage February 2019. CSR Advanced Manufacturing Hub. Mod 3 – Aboriginal Cultural Heritage Assessment Report. Report to CSR Building Products Limited.

Stanner, W.E.H. 1965. Aboriginal Territorial Organization: Estate, Range, Domain and Regime. *Oceania*. 36, No 1, pp 1-26.

Guidelines

Heritage NSW, former OEH, 2010a, *Code of Practice for the archaeological investigation of Aboriginal objects in NSW*.

Heritage NSW, former OEH, 2010b, *Aboriginal cultural heritage consultation requirements for proponents 2010*.

Heritage NSW, former OEH, 2010c, *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW*.

APPENDIX 1: UNEXPECTED FINDS PROCEDURE

Examples of Aboriginal and historical artefacts are provided in Figure 4 to Figure 7 below.

If unanticipated archaeological items are uncovered at any time throughout the life of the project the following actions must be followed:

- Cease all activity in the vicinity of the find
- Leave the find in place and protect it from harm
- Erect a 10 m exclusion zone (temporary fencing/signage) around the find or the outer edge of the find if a larger item
- Take note of the details of the find and its location and take photographs of the find *in situ*
- Inform the Site Manager or equivalent overseer
- CSR must contact a heritage consultant to assess the find
- If the item is identified as a historic (non-Aboriginal) heritage item, the heritage consultant will advise whether additional investigation is required in accordance with the conditions of approval and Heritage NSW guidelines
- Work in the immediate vicinity of an unidentified finds site may only recommence if the object or place is confirmed in writing by Heritage NSW not to be an Aboriginal object or Aboriginal Place.
- If the item is confirmed as an Aboriginal artefact CSR will either notify Heritage NSW and Gandangara LALC directly or request the EPC Site Manager / O & M Site Manager to notify Heritage NSW and Gandangara LALC
- Await further advice from the heritage consultant before proceeding with work in the exclusion zone.
- Further archaeological investigation may be required as advised by the heritage consultant prior to work proceeding in the exclusion zone.
- In particular, further archaeological investigation will be required if the artefact/s were not part of the AHIMS sites identified in this report.
- Works may only continue in the location of a confirmed Aboriginal archaeological find once Heritage NSW issues written consent that it is satisfied with measures implemented or to be implemented in respect of that find.

Examples of Aboriginal heritage and historical archaeological remains

Figure 4: Aboriginal stone tools



Figure 5: Historical artefacts



Figure 6: Historical footings



Figure 7: Historical footings



APPENDIX 2: HERITAGE NSW COMMENTS ON HMP

To date (4 March 2021) there have been no comments from Heritage NSW on the HMP.

APPENDIX 3: RAP CONSULTATION LOG FOR HMP

CONTACT	ORGANISATION	CONTACTED BY	ORGANISATION	METHOD	DATE	COMMENT/ RESPONSE
HMP SENT FOR REVIEW						
Heritage NSW	Heritage NSW	M. Lever	Artefact Heritage	Email	22/01/2021	
Jody Kulakowski	Barking Owl Aboriginal Corporation	M. Lever	Artefact Heritage	Email	22/01/2021	
Lee Field	Barraby Cultural Services	M. Lever	Artefact Heritage	Email	22/01/2021	
Seli Storer	Biamanga	M. Lever	Artefact Heritage	Email	22/01/2021	
Glenda Chalker	Cubbitch Barta Native Title Claimants Aboriginal Corporation	M. Lever	Artefact Heritage	Email & Mail	22/01/2021	
Corey Smith	Cullendulla	M. Lever	Artefact Heritage	Email	22/01/2021	
Celestine Everingham	Darug Aboriginal Cultural Heritage Assessments	M. Lever	Artefact Heritage	Mail	25/01/2021	
Des Dyer	Darug Aboriginal Land Care	M. Lever	Artefact Heritage	Email	22/01/2021	
Justine Coplin	Darug Custodian Aboriginal Corporation	M. Lever	Artefact Heritage	Email	22/01/2021	
Anna O'Hara	Darug Land Observations	M. Lever	Artefact Heritage	Email	22/01/2021	
Paul Boyd & Lilly Carroll	Didge Ngunawal Clan	M. Lever	Artefact Heritage	Email	22/01/2021	

CONTACT	ORGANISATION	CONTACTED BY	ORGANISATION	METHOD	DATE	COMMENT/ RESPONSE
Barry Gunther	Gandangara Local Aboriginal Land Council	M. Lever	Artefact Heritage	Email	22/01/2021	Email bounced
Basil Smith	Goobah	M. Lever	Artefact Heritage	Email	22/01/2021	
Wendy Smith	Gulaga	M. Lever	Artefact Heritage	Email	22/01/2021	
Wendy Morgan	Guntawang Aboriginal Resources Incorporated	M. Lever	Artefact Heritage	Email	22/01/2021	
Uncle Phil Khan	Kamilaroi-Yankuntjatjara Working Group	M. Lever	Artefact Heritage	Email	22/01/2021	
Roxanne Smith	Murramarang	M. Lever	Artefact Heritage	Email	22/01/2021	
Scott Franks	Tocomwall	M. Lever	Artefact Heritage	Email	22/01/2021	
Phillip Boney	Wailwan Aboriginal Digging Group	M. Lever	Artefact Heritage	Email	22/01/2021	
Bo Field	Yurrandaali Cultural Services	M. Lever	Artefact Heritage	Email	22/01/2021	
Arika Jalomaki	Yulay Cultural Services	M. Lever	Artefact Heritage	Email	22/01/2021	
RESPONSES						
Michael Lever	Artefact Heritage	Glenda Chalker	Cubbitch Barta Native Title Claimants Aboriginal Corporation	Email	23/01/2021	Requested physical copy of HMP

CONTACT	ORGANISATION	CONTACTED BY	ORGANISATION	METHOD	DATE	COMMENT/ RESPONSE
Michael Lever	Artefact Heritage	Basil Smith	Goobah	Email	29/01/2021	235 Martin Road, Badgerys Creek HMP, I have reviewed and support the development, please keep me informed on any further developments
Michael Lever	Artefact	Not stated	Biamanga	Email	9/2/2021	This is to confirm that we support the following Heritage Management Plan (HMP) at 235 Martin Road, Badgerys Creek please keep us informed on any further developments
Michael Lever	Artefact	Kadibulla Khan	Kamilaroi-Yankuntjatjara Working Group	Email	12/2/2021	Thank you for your report for 235 Martin Rd, Badgerys Creek. We support your report and look forward to salvaging this site. If Artefacts are found they I recommend they are housed at the Local Aboriginal Land Council.

APPENDIX 4: DPIE REQUEST FOR INFORMATION

**Badgerys Creek Quarry and Brick Making Project 10_0014
Post Approval Review**



Document: CSR Advanced Manufacturing Hub Heritage Management Plan

Revision: Version 3 Dated 04 March 2021

Reviewed: Denise Day on 22/03/2021

Heritage Management Plan	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Company Response
Condition 30, Schedule 3	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Company Response
Heritage Management Plan (HMP) The Proponent must prepare an Aboriginal Heritage Management Plan for the project to the satisfaction of the Secretary. The plan must:		See below		
(a) be prepared by suitably qualified and experienced persons;	Yes	Section 1.3 describes the qualifies of the author. Michael Lever (Heritage Consultant, Artefact Heritage). Michael has a BSc degree in Archaeology from the University of Sydney, Honours in Archaeology from La Trobe University (1st) and is a current PhD candidate at the University of Sydney. He has ten years' experience in consulting archaeology in Victoria and NSW.	No further action required	
(b) be prepared in consultation with Registered Aboriginal Parties and Heritage NSW;	Yes	Section 2.2 provides RAP comments on the HMP. All comments and how they have been addressed in the HMP have been addressed in Table 4. Section 2.4 Provides Heritage NSW comments on the HMP. no response had been received to the HMP from Heritage NSW. Appendix 3 details the RAP consultation log for the HMP.	Confirm date in Section 2.2 paragraph 1. States 22 November 2018, but remaining dates for review and comment are more recent.	Changed date to 21 January 2021
(c) be submitted to the Secretary for approval within 6 months of the determination of Modification 3 and 4, unless otherwise agreed by the Secretary;	Yes	Mod 3 and 4 was approved in August 2020. The HMP states that DPIE granted an extension to this lodgement date, although no date has been provided It is assumed this submission it within the approved extension granted by DPIE.	No further action required	
(d) include a description of the measures that would be implemented to: (i) protect, monitor and manage identified Aboriginal objects and Aboriginal places on the site (including any proposed archaeological investigations and salvage measures), including specific measures to	Yes	Only one identified Aboriginal object requiring salvage remains on the site. This is Isolated Artefact BCBW18 IF 01 (AHIMS ID 45-5-5165) which is to be collected prior to commencement of ground disturbing works, as stipulated in Section 6.1.1.3. A qualified heritage professional will attend site with RAPs to locate Isolated Artefact BCBW18 IF 01 (AHIMS ID 45-5-5165). It is proposed	No further action required	

**Badgerys Creek Quarry and Brick Making Project 10_0014
Post Approval Review**



Document: CSR Advanced Manufacturing Hub Heritage Management Plan

Revision: Version 3 Dated 04 March 2021

Reviewed: Denise Day on 22/03/2021

Heritage Management Plan	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Company Response
ensure that the archaeological deposit adjacent to Badgerys Creek (see Appendix 5) is not impacted during regeneration operations;		that collection of Isolated Artefact BCBW18 IF 01 (AHIMS ID 45-5-5165) should take place immediately prior to (on the same day) as reburial of other artefacts that were retrieved as a result of archaeological test excavation. No further investigations or salvage are currently proposed. The reference to 'archaeological deposit adjacent to Badgerys Creek' is a historical recommendation which relates to land assessed and managed under AECOM 2010.		
(ii) conserve the entire extent of the hearth feature within site BCBW18 AS 02 (AHIMS ID 45-5-5164);	Yes	Section 6.1.1.2 states that prior to commencement of ground disturbing works permanent and robust barriers must be placed around a 10 m buffer measured from the outer edge of the heat retainer hearth feature in BCBW18 AS 02 (AHIMS ID 45-5-5164). This barrier must be of a strength sufficient to withstand potential impacts associated with the construction and operation and of sufficient height to prevent incursion. The 10 m buffer zone must be marked as a NO GO ZONE on site plans and on permanent signs attached to the buffer zone fencing. Entry to the NO GO ZONE must be restricted to staff who have undergone heritage induction and must be limited to entry for the purposes of site maintenance such as above-surface bushfire hazard reduction. This does not permit activities likely to disturb the ground surface such as stump or root removal.	No further action required	
(iii) manage the discovery of previously unidentified Aboriginal objects or Aboriginal places on the site; and	Yes	All staff involved in construction of the project will undergo heritage induction as detailed in Section 6.1.1.1 (prior to commencement of works), Section 6.2.1 Heritage induction and Appendix 2. Induction will include the location of the heat retainer hearth feature in BCBW18 AS 02 (AHIMS ID 45-5-5164), the identification of potential Aboriginal cultural heritage items and protocols to be followed in the event that Aboriginal cultural heritage items or skeletal remains are identified.	Typo – change Appendix 2 to Appendix 1. Include reference to Section 6.2.1 in Table 1.	Inserted and amended

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Document: CSR Advanced Manufacturing Hub Heritage Management Plan

Revision: Version 3 Dated 04 March 2021

Reviewed: Denise Day on 22/03/2021

Heritage Management Plan	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Company Response
(iv) facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site; and	Yes	Section 2.3 identifies consultation and cooperation with the RAPs for the proposed reburial program for artefacts resulting from test excavation and proposed surface salvage. RAP consultation would also be required in the event of any changes to the proposed management of the hearth feature portion of site BCBW18 AS 02. Incorrect references listed in Table 1.	Update Table 1 to include Section 2.3	Updated
(e) include a protocol to be implemented in the event that skeletal remains are discovered during the project. The Proponent must implement the Aboriginal Heritage Management Plan as approved by the Secretary.	Yes	Section 6.2.3 Aboriginal ancestral remains. Actions include ceasing work in the vicinity of the remains and immediate surrounds (10 m), covering the remains from view, securing the site from unauthorised trespass and contracting NSW Police immediately. If the remains are determined by NSW Police to be Aboriginal ancestral remains, Gandangara LALC and Heritage NSW must be informed. The mode of exhumation and repatriation of Aboriginal ancestral remains is to be as determined by the Gandangara LALC and by Aboriginal people with connection to local country.	No further action required	
Condition 29, Schedule 3	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Company Response
The Proponent must ensure that: (a) archaeological salvage of site BC-01-09 is undertaken in accordance with Recommendation 1, Section 6.0 of the Aboriginal Heritage Assessment – Addendum in the EA;	Yes	This is an historical recommendation which relates to land and an artefact assessed and managed under AECOM 2010. Salvage has been completed.	No further action required	
(b) regeneration works, dewatering activities and water discharges in the area of the archaeological deposit identified adjacent to Badgerys Creek (see Appendix 5) are either avoided, or else undertaken in a manner that will minimise harm to	Yes	This is an historical recommendation which relates to land assessed and managed under AECOM 2010. The current report does not assess land adjacent to Badgerys Creek.	No further action required	

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Heritage Management Plan	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Company Response
Aboriginal objects, to the satisfaction of the Secretary; and				
(c) measures are implemented prior to the commencement of Phase 1, to conserve and protect the hearth feature within site BCBW18 AS 02 02 (AHIMS ID 45-5-5164).	Yes	<p>Section 6.1.1.2 states that prior to commencement of ground disturbing works, permanent and robust barriers must be placed around a 10 m buffer measured from the outer edge of the heat retainer hearth feature in BCBW18 AS 02 (AHIMS ID 45-5-5164).</p> <p>This barrier must be of a strength sufficient to withstand potential impacts associated with the construction and operation and of sufficient height to prevent incursion. The 10 m buffer zone must be marked as a NO GO ZONE on site plans and on permanent signs attached to the buffer zone fencing.</p> <p>Entry to the NO GO ZONE must be restricted to staff who have undergone heritage induction and must be limited to entry for the purposes of site maintenance such as above-surface bushfire hazard reduction. This does not permit activities likely to disturb the ground surface such as stump or root removal.</p>	No further action required	
Condition 31, Schedule 3	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Company Response
If human remains are discovered on the site, then all work in the area surrounding the discovery must cease, and the area must be secured. The Proponent must immediately notify NSW Police Force and Heritage NSW, and work must not recommence in the area until authorised by NSW Police Force and Heritage NSW.	Partial	<p>Section 6.2.3 Aboriginal ancestral remains. Actions include ceasing work in the vicinity of the remains and immediate surrounds (10m), covering the remains from view, securing the site from unauthorised trespass and contracting NSW Police immediately. If the remains are determined by NSW Police to be Aboriginal ancestral remains, Gandangara LALC and Heritage NSW must be informed. The mode of exhumation and repatriation of Aboriginal ancestral remains is to be as determined by the Gandangara LALC and by Aboriginal people with connection to local country.</p> <p>The action does not include notification to Heritage NSW.</p>	Include the requirement to notify Heritage NSW should human remains be found.	Requirement inserted to Section 6.2.3
Condition 32, Schedule 3	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Company Response

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Reviewed: Denise Day on 22/03/2021

Heritage Management Plan	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Company Response
If any potential Aboriginal object or Aboriginal place is identified on the site, or suspected to be on the site:	Yes	Section 6.2.2 details unexpected finds and the Unexpected Finds procedure provided in Appendix 1.	No further action required	
(a) all work in the immediate vicinity of the object or place must cease immediately;	Yes	Unexpected Finds procedure provided in Appendix 1.	No further action required	
(b) a 10 m buffer area around the object or place must be cordoned off; and	Yes	Unexpected Finds procedure provided in Appendix 1.	No further action required	
(c) Heritage NSW must be contacted immediately.	Yes	Unexpected Finds procedure provided in Appendix 1.	No further action required	
Condition 33, Schedule 3	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Company Response
Work in the immediate vicinity of a site identified in condition 32 of this Schedule may only recommence if:		See below		
(a) the object or place is confirmed by Heritage NSW upon consultation with the Registered Aboriginal Parties not to be an Aboriginal object or Aboriginal Place;	No	The process in Appendix 1 Unexpected Finds Protocol states: <i>Await further advice from the heritage consultant before proceeding with work in the exclusion zone.</i> The protocol does not include that confirmation by Heritage NSW is required.	Include in Appendix 1 that work in the immediate vicinity of an unidentified finds site may only recommence if the object or place is confirmed by Heritage NSW not to be an Aboriginal object or Aboriginal Place.	Inserted to Appendix 1
(b) the Aboriginal Cultural Heritage Management Plan is revised to include the object or place and appropriate measures in respect of it; or	No	The HMP does not include a review and revision section, or include a requirement to revise the plan should an Aboriginal object or Aboriginal Place be confirmed.	Include that should an Aboriginal object or Aboriginal Place be confirmed, work in the immediate vicinity may only recommence if the HMP is revised to include the object or place and appropriate measures identified, or the	Inserted as Section 6.2.4

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Document: CSR Advanced Manufacturing Hub Heritage Management Plan

Revision: Version 3 Dated 04 March 2021

Reviewed: Denise Day on 22/03/2021

Heritage Management Plan	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Company Response
	No		Secretary is satisfied with the measures to be implemented and makes a written direction.	
(c) the Secretary is satisfied with the measures to be implemented in respect of the object or place and makes a written direction in that regard.	No	Not included in the HMP.	As above	Inserted as Section 6.2.4
General Comments			Action Required	Company Response
None				
Other Agency Comments			Action Required	Company Response
None				



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