132 McCredie Road, Guildford West

Aboriginal Cultural Heritage Assessment Report

LGA: Cumberland

Report to Goodman

February 2025

artefact

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EXECUTIVE SUMMARY

This Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by Artefact Heritage to accompany a State Significant Development Application (SSDA) for the construction and ongoing operation of a data centre facility at 132 McCredie Road, Guildford West NSW 2161, in the Cumberland Council Local Government Area (LGA). The site is legally described as Lot 1 in DP596315.

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the Project Pluto Data Centre (SSD-69223466) dated 4 April 2024.

Artefact have previously prepared an Archaeological Survey Report (ASR) that included an archaeological survey of 132 McCredie Road (the study area) which identified that the study area has been heavily disturbed. No Aboriginal objects or sites were seen during the site survey and no potential for Aboriginal sites or objects was identified.

The assessment found that:

- There are no Aboriginal Heritage Information Management System (AHIMS) sites located within the study area
- The study area, 132 McCredie Road, Guildford West, has been subjected to significant levels of disturbance from development, services installation, land clearing and remediation works
- No Aboriginal objects or sites were identified during the survey, nor were any area or archaeological potential
- The proposed works are unlikely to result in any impacts to Aboriginal heritage

Based on the findings of the assessment and Aboriginal Stakeholder Consultation the following recommendations are made:

- No further Aboriginal heritage assessment is required for the works to proceed. However, if changes are made to the proposal that will result in impacts to areas not assessed by this report, additional Aboriginal heritage assessment may be required
- An Unexpected Finds Policy for the works should be established
- To support the Unexpected Finds Policy consultation with Registered Aboriginal Parties (RAPs) must be maintained
- A Heritage Induction must be prepared and presented to all site workers.

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NOTE ON LANGUAGE IN QUOTES

A number of quotes used in this report come from documents written in the nineteenth and twentieth centuries by European observers. They have been included because they provide information on the lives of Aboriginal people in the region, though the language used and views expressed by these writers can be offensive and distressing.

GLOSSARY OF TECHNICAL TERMS

Aboriginal cultural heritage: The material (objects) and intangible (mythological places, dreaming stories etc) traditions and practices associated with past and present-day Aboriginal communities.

Aboriginal object: Any deposit, object or material evidence (not being a handicraft made for sale), including Aboriginal remains, relating to the Aboriginal habitation of NSW.

Aboriginal place: Any place declared to be an Aboriginal place under s.94 of the *National Parks and Wildlife Act 1974*.

AHIMS: Acronym for **'**Aboriginal heritage information management system'. AHIMS is a register that contains information about NSW Aboriginal heritage, and it is maintained by DECCW.

Archaeological object: any object that was made, affected, used, or modified in some way by humans in the past and has been discarded.

Archaeology: The scientific study of human history, with focus on material remains and ethnographic evidence.

Area of archaeological sensitivity: A part of the landscape that contains demonstrated occurrences of cultural material. The precise level of sensitivity will depend on the density and significance of the material.

Artefact: An item of cultural material created by humans.

Artefact scatter: Where two or more stone artefacts are found within an area of potential archaeological deposit or a site.

Bedrock: A consolidated rock that is unbroken and un-weathered, located beneath soil or rock fragments.

Clay: A type of sediment with particles less than 4 microns in size and that is composed of clay minerals (Keary 2001, 49).**Cortex:** The outer weathered surface of stone; if smooth, it can indicate the source of stone was a pebble.

Easting: This is a measurement used to determine location. The easting is the x-coordinate and relates to the vertical lines on a map, which divide east to west. It increases in size when moving

Exposure: The level of ground exposure is based on the whether the landform is eroding, aggrading or stable.

Footprint: The scale, extent or mark that a development makes on the land in relation to its surroundings.

Holocene: The Holocene epoch forms part of the late Quaternary period and extends from about 11,000 years ago to the present day.

***In situ*:** A description of any cultural material that lies undisturbed in its original point of deposition.

Layer: In stratigraphy, it is used to describe a horizon (soil, rock, charcoal) that is distinct from its surrounds.

Northing: This is a measurement used to determine location. The northing is the y-coordinate and relates to the horizontal lines on a map, which divide north to south. It increases in size when moving further north.

Potential Archaeological Deposit (PAD): A PAD is a location that is considered to have a potential for subsurface Aboriginal objects. This is determined from a visual inspection of the site, background research of the area and the landform's cultural importance.

Pleistocene: The Pleistocene is an epoch within the early Quaternary period, extending from about 1.6 million years ago to about 11,700 years ago. The end of the Pleistocene is marked by the last of the great ice ages.

Sand: A material composed of small grains (0.625-2.0 mm) (Keary 2001, 233). Sand is formed from a variety of minerals and rocks, but commonly contains silica, such as quartz.

Sandstone: Is a sedimentary rock formed from sand-sized grains.

Scarred trees: Trees that feature Aboriginal derived scars are distinct due to the scar's oval or symmetrical shape and the occasional use of steel, or more rarely, stone axe marks on the scar's surface. Scarred trees are identified by the purposeful removal of bark for use in the manufacture of artefacts such as containers, shields and canoes. The bark was also used for the construction of shelters. Other types of scarring include toeholds cut in the trunks or branches of trees for climbing purposes and the removal of bark to indicate the presence of burials in the area.

Silcrete: Soil, clay or sand sediments that have silicified under basalt through groundwater percolation. It ranges in texture from very fine grained to coarse grained. At one extreme it is cryptocrystalline with very few clasts. It generally has characteristic yellow streaks of titanium oxide that occur within a grey and less commonly reddish background. Used for flaked stone artefacts.

Stratigraphy: The study of soil stratification (layers) and deposition.

Survey: In archaeological terms, this refers to walking over a surface while studying the location of artefacts and landmarks. These are then recorded and photographed.

Visibility: Refers to the degree to which the surface of the ground can be observed. This may be influenced by natural processes such as wind erosion or the character of the native vegetation, and by land use practices, such as ploughing or grading. It is generally expressed in terms of the percentage of the ground surface visible for an observer on foot.

1.0 INTRODUCTION

1.1 Project brief

A State Significant Development Application (SSDA) has been prepared in support of a proposed data centre at 132 McCredie Road, Guildford West NSW 2161. The site is zoned E4 General Industrial and has a road frontage to McCredie Road. The developable site area is 71,710 sqm.

The proposed development comprises:

- Site preparation works including bulk excavation and removal of existing hard standing and structures on the site, tree and vegetation clearing, and bulk earthworks;
- Construction, fit out and operation of a data centre with an approximate building height of 25.77m and total gross floor area of 29,444 m2 comprising:
    - At-grade parking for 53 car parking spaces and 2 accessible car parking spaces
    - Two (2) loading dock spaces.
    - Two (2) levels of technical data hall floor space with incorporating a total of nine (9) data halls
    - Ancillary office space
- Provision of required utilities, including:
    - Fuel storage
    - Two (2) Switch-rooms
    - Four (4) Industrial water storage tanks
- Vehicle entry and egress driveways located along McCredie Road
- Internal access road
- Associated landscaping and site servicing
- Installation of services and drainage infrastructure.

1.2 Description of the study area

The site (Figure 1) is located on Gandangara Land and is in the Smithfield Industrial Area within the Cumberland Local Government Area (LGA). It is bounded by McCredie Road to the north.

The front part of the site adjoins the Guildford Transmission Substation, which is located immediately to the east and fronts onto McCredie Road. Other industrial uses are located further east, with residential properties beyond.

The Guildford West Sports Ground, which comprises several playing fields, is located to the south of the Guildford Transmission Substation. The playing fields bound the southern part of the site to the east. The playing fields / public recreation area also abut the southern boundary of the site.

Prospect Creek is located to the south of the public recreation area and is zoned C2 Environmental Protection. The area to the south of Prospect Creek is predominately characterised by low density single storey residential housing.

The site is located in the southeastern corner of the Smithfield Industrial Estate and is within close proximity of the Cumberland Highway (A28) and M4 and M7 motorways, which provide access to Sydney CBD, western Sydney and the south. A range of large format industrial uses are located to the west and northwest of the site. The Smithfield Industrial Estate extends across the A28 to Gipps Road (approximately 3km west of the site). It forms part of the broader Smithfield Wetherill Park industrial area, which is one of the largest of its kind in the Southern Hemisphere and makes a significant contribution to the New South Wales and Australian economies.

The site has a net developable area of 71,710 sqm and is currently vacant. It previously operated as a Castrol Lubricants facility. However, the majority of the site has now been cleared and subject to category 1 remediation works. A single storey office building is located on the northern portion of the site fronting McCredie Road. The building is vacant.

The proposal seeks consent for development to be constructed and operated in two phases to reflect the staged availability power supply. The proposed stages involve the following:

Stage 1: Construction of the main data centre building as well as the car park, perimeter access road, site access/exit driveways and landscaping. Stage one will involve the fit-out and operation of five of the 9 proposed data halls at levels 1 and 2 as well as the associated electrical rooms, generators, storage and office rooms.

Stage 2: Completion of the ultimate development scheme involving the extension of the building to the south with an additional four data halls, associated electrical rooms and generators, and associated landscaping and external works. The electrical substations will also be constructed in the north of the site during this phase.

The works are to be completed in four (4) construction stages, as per below:

Stage 1:

- CC1 – Site Preparation works (including but not limited to vegetation removal, earthworks & piling, installation of footings, retaining walls)
- CC2 – Inground services installation, structural works
- CC3 – Façade construction, installation of services, fit out
- CC4 – Landscaping and external works

Stage 2:

- CC1 – Site Preparation works (earthworks & piling, installation of footings)
- CC2 – Inground services installation, structural works
- CC3 – Façade construction, installation of services, fit out
- CC4 – Landscaping and external works

1.3 Aims and objectives

This ACHAR aims to identify and assess the Aboriginal heritage values of the study area and consult with Aboriginal stakeholders in this process and present the results of the archaeological investigation undertaken in the ASR. This report will be included in the EIS used to inform the SSD application for the project.

The objectives of this report are to:

- Identify any Aboriginal cultural values in and around the study area
- Assess these cultural values, as related to the study area, through consultation with Aboriginal stakeholders
- Assess the impacts the proposed construction might have on Aboriginal cultural heritage and the potential archaeological resources within the study area
- Document the process and outcomes of Aboriginal stakeholder consultation
- Provide a plain English summary of the results of the ASR to the Registered Aboriginal Parties (RAPs).

1.4 Statutory framework

The proposal for the data centre is being assessed as a State Significant Development (SSD) under Part 4 Division 4.1 of the *EP&A Act 1979*. The SEARs for the project were issued for the proposal on 4 April 2024 (SSD-69223466). Regarding Aboriginal cultural heritage, the SEARs require:

> *19. Aboriginal Cultural Heritage*
>
> *Provide an Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared in accordance with relevant guidelines, identifying, describing and assessing any impacts to any Aboriginal cultural heritage sites or values associated with the site.*

This ACHAR has been prepared to address this condition of the SEARs. It has been prepared in accordance with the following guidelines:

- *Code of Practice for Archaeological Investigations of Aboriginal Objects in New South Wales* (Department of Environment, Climate Change & Water 2010b); hereafter the Code of Practice
- *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011); hereafter the Guide
- *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change & Water 2010a); hereafter the Consultation Requirements

In accordance with Section 2.3 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (Department of Environment, Climate Change & Water 2010b), an ACHAR must include a standalone technical report as an appendix. Artefact have prepared an Archaeological Survey Report (ASR) in conjunction with this report to address that requirement (see Appendix A – Technical report).

1.5 Authorship

In accordance with section 1.6 of the Code of Practice (DECCW 2010a), an ACHAR must be prepared by persons who are skilled and experienced in the archaeology of Aboriginal people, for the purposes of the Code of Practice an appropriately skilled and experienced person has:

> *1 a minimum of a bachelor's degree with honours in archaeology or relevant experience in the field of Aboriginal cultural heritage management, and*
>
> *2 the equivalent of two years full-time experience in Aboriginal archaeological investigation, including involvement in a project of similar scope, and*
>
> *3 a demonstrated ability to conduct a project of the scope required through inclusion as an attributed author on a report of similar scope. (DECCW 2010a)*

A summary of authors of this report, their experience and qualifications, are provided in Table 1.

Table 1: Summary of Authors and Contributors.

Authors and Contributors	Qualifications	Experience	Role
Josh Symons (Principal, Artefact)	• Bachelor of Historic and prehistoric	15 + years	• Review and management input
Ryan Taddeucci (Aboriginal Team Leader, Artefact)	• Master of Museum Studies • Graduate Certificate (Maritime Archaeology) • Bachelor of Arts (Honours - Archaeology)	10+ years	• Review and management input • Project management
Gareth Holes (Senior Heritage Consultant, Artefact)	• Bachelor of Arts (Hons), Archaeological Practice • Master of Arts, Neolithic Europe	+17 years	• Project management • Report preparation: ○ Consultation ○ Cultural Heritage assessment ○ Significance assessment ○ Impact assessment ○ Mitigation measure ○ Conclusions and recommendations
Sammuel Sammut (Heritage Consultant, Artefact)	• Bachelor of Arts (Hons), USYD • Master of Archaeological and Evolutionary Science ANU	>4 years	• Project management • Report preparation: ○ Project background ○ Summary of background information
Mike Douglas (GIS Officer, Artifact)	• Bachelor of Arts North American Archaeology • Master of Science Geology • Master's Certificate in GIS Science	20+ years	• Mapping and GIS data

Figure 1: Study area

2.0 SUMMARY OF CONSULTATION

2.1 Stage 1

2.1.1 Agency letters

In accordance with Section 4.1.2 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (The Consultation Requirements), Artefact Heritage corresponded with the following organisations by email on 10 April 2024 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:

- Heritage NSW
- Native Title Service Corporation (NTSCorp)
- National Native Title Tribunal
- Office of the Registrar, Aboriginal Land Rights Act 1983
- Cumberland City Council
- Gandangara Local Aboriginal Land Council
- Greater Sydney Local Land Services

The due date for responses was 24 April 2024.

2.1.2 Advertisement

In accordance with Step 4.1.3 of the Consultation Requirements, an advertisement was published online in the Daily Telegraph for publication on 10 April 2024. The publication invited the participation of Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places within the local area, requesting their response by 24 April 2024.

2.1.3 Registration of Aboriginal parties

In accordance with Step 4.1.3 of the Consultation Requirements, an invitation to Register an Interest in the ACHAR was sent by email or letter on 30 April 2024 to all those people identified through contacting the agencies. The due date for responses was 15 May 2024. A total of 10 individuals/organisations responded to register an interest in the project as RAPs (listed below in Table 2). One group requested their details be withheld, therefore have been redacted in the below list. One registration was received late and were added to the consultation at that time.

Table 2: Groups or individuals registered as RAPs

Organisation	Contact person
[redacted]	

Organisation	Contact person
[redacted]	

2.2 Stage 2 and Stage 3

Stage 2 of the consultation process is to provide RAPs with information about the scope of the proposed project and the proposed cultural heritage assessment process. Stage 3 consultation facilitates a process whereby RAPs can contribute to culturally appropriate information gathering and the research methodology, provide information that will enable the cultural significance of Aboriginal objects and/or places on the proposed project area to be determined, and have input into the development of any cultural heritage management options.

In accordance with Stages 2 and 3 of the Consultation Requirements, a copy of the proposed assessment methodology was sent to the RAPs by email on 16 May 2024, requesting feedback by 13 June 2024. One registration of interest was received late, a copy of the ACHAR Methodology was provided alongside the ACHAR on 14 June 2024. The draft assessment methodology presented information about the project and invited feedback on the cultural significance of the area. A summary of the comments received by Artefact is presented in Table 3.

Table 3. Summary of Aboriginal stakeholder comments on the Assessment Methodology

Person / RAP group	Comment	Response
[redacted]	Am happy with methodology and can provide site officers for fieldwork	Noted
	Email not working if can't be resolved will require physical copy	Email issue was resolved
	Support the methodology and wish to be kept informed	Noted
	Endorse the recommendation	Noted
	Agree with methodology and have no comments at this time	Noted

Person / RAP group	Comment	Response
[redacted]	Support the methodology, would like to be involved in all meetings, reports, sharing of cultural information and fieldwork	Noted

2.3 Stage 4

A copy of the draft ACHAR was sent to the RAPs by email on14 June 2024, requesting feedback by 12 July 2024. A summary of responses received by Artefact is provided in Table 4.

Table 4. Summary of Aboriginal stakeholder comments on the draft ACHAR

Person/ RAP group	Comment	Response
[redacted]	Thanks. We are happy with everything.	Noted
	I have read the project information and ACHAR for the project. I endorse the recommendations.	Noted

A project update was sent by email on 9 December 2024, notifying RAPs of the continuation of the project to extend RAP engagement and avoid consultation lapse in compliance with Heritage NSW. A summary of responses received by Artefact is provided in Table 5.

Table 5. Summary of Aboriginal stakeholder comments on consultation notification

Person/ RAP group	Comment	Response
[redacted]	Thanks for the update	Noted
	[redacted]	Noted
	Thanks for the update	Noted

2.4 Ongoing consultation

In accordance with Section 4.4.5 of the Consultation Requirements, the finalised version of this ACHAR will be issued to the RAPs. Consultation with the RAPs should continue throughout the life of the project, post approval to facilitate assessment of unexpected finds.

3.0 SUMMARY AND ANALYSIS OF BACKGROUND INFORMATION

3.1 Aboriginal history

Many Aboriginal people, like other Indigenous or First Nations people around the world, say they have been living on Country for 'time immemorial' – that they have always been here, and their origins lie in the creation of the land and animals. As Elder Aunty Jenny Munro expresses:

> *'...from time immemorial, we believe as Aboriginal people, Australia has been here from the first sunrise, our people have been here along with the continent, with the first sunrise. We know our land was given to us by Baiami, we have a sacred duty to protect that land'* (Munro in Currie 2008:4)

Over the last few decades, archaeologists' knowledge of deep human time in Australia has expanded from just a few thousand years in the 1950s, to 25,000 years in the 1960s, then 40,000 years, to now around 60,000 years or more (Belshaw, Nickel, and Horton 2020; Griffith 2018, 112; Karskens 2009, 25).

Sydney Aboriginal society was not static and did not cease after contact with Europeans. Both material and cultural traditions of Aboriginal Sydney continued after the devastation to Aboriginal society, sometimes for example, by incorporating non-Aboriginal materials in traditional elements such as using glass and ceramics to make spear points and other tools. Twenty-nine engraved and pigment art sites have been dated to the period after European arrival. Some creation and other stories told to R. H. Mathews by Gundungurra (Gandangarra) people in 1901 were carried on for generations and survive today (Irish and Gowan 2012, 61; Artefact Heritage 2022, 18; Goward 2011; Meredith 1989; Smith and Jennings 2044, 241). A review of the history of Aboriginal people in the Sydney area is provided in the ASR (11.0 Appendix A).

3.2 Archaeological background

Three previous archaeological studies investigating the region around the study area are summarised below for context:

Study	Summary
RPS, 2016. Aboriginal Cultural Heritage Assessment: Lot 18, DP 249417, 24 David Road, Wetherill Park, NSW, Fairfield Local Government Area. Report prepared for BetterGrow.	RPS performed a cultural heritage assessment on a site approximately 5km west of the present study area. No AHIMS sites were identified in the site being investigated by RPS; rather all the sites identified were located much closer to Prospect Creek. Furthermore, it was noted that the site had been subject to significant levels of disturbance, and that the potential for artefacts to be present was low as a result. RPS concluded that, based on the low archaeological potential and absent cultural values of the site, no further investigation was necessary and works could proceed.
Mary Dallas Consulting Archaeologists, 2018. Aboriginal Heritage Assessment Report: Prospect South Planning Proposal. Report prepared	Mary Dallas Consulting Archaeologists (MDCA) prepared a heritage assessment report for a site approximately 6km northwest of the present study area. There were found to be 39 AHIMS sites in the search area, with 80% of these consisting of low-density artefact scatters or isolated finds. No AHIMS sites were located within the area investigated by MDCA, nor were any artefacts encountered during on-

Study	Summary
for Office of Strategic Lands.	site investigations. It was found that the area had been significantly disturbed by historical developments, and that these were likely to have removed evidence of Aboriginal activity or occupation at this site.
Apex Archaeology, 2019. Proposed Expansion of Fairfield Sustainable Resource Centre, Wetherill Park, Fairfield: Aboriginal Archaeological Assessment. Report prepared for DFP Planning.	Apex Archaeology investigated a site approximately 3km west of the present study area. Apex identified 25 AHIMS sites within the vicinity of their study area, although none were located inside it. These sites were concentrated around permanent sources of water and primarily consisted of low-density scatters or isolated artefacts. Survey of the study demonstrated that it had been subjected to significant levels of disturbance and did not contain archaeologically sensitive landforms, ultimately leading Apex to conclude that the site possessed no archaeological potential and that no further assessment was required for works to proceed.

The previous Aboriginal archaeological investigations in the local area have found that Aboriginal sites are predominantly low-density artefact scatters and are closely associated with watercourses, In addition the investigations have found that disturbance associated with historic development has a significant impact on potential for the presence of Aboriginal sites and objects.

3.3 AHIMS search

NOTE: The location of Aboriginal sites is considered culturally sensitive information. It is advised that this information, including the AHIMS data appearing on mapping below must be removed from this report if it is to enter the public domain.

An extensive search of the Aboriginal Heritage Information Management System (AHIMS) was undertaken on 9 April 2024 (Client Service ID: 881378) to determine the location of Aboriginal sites in relation to the current study area. The search area was defined as the study area and included 4km by 6km of land surrounding the study area to inform the characterisation of the local archaeological context. The AHIMS search parameters were as follows:

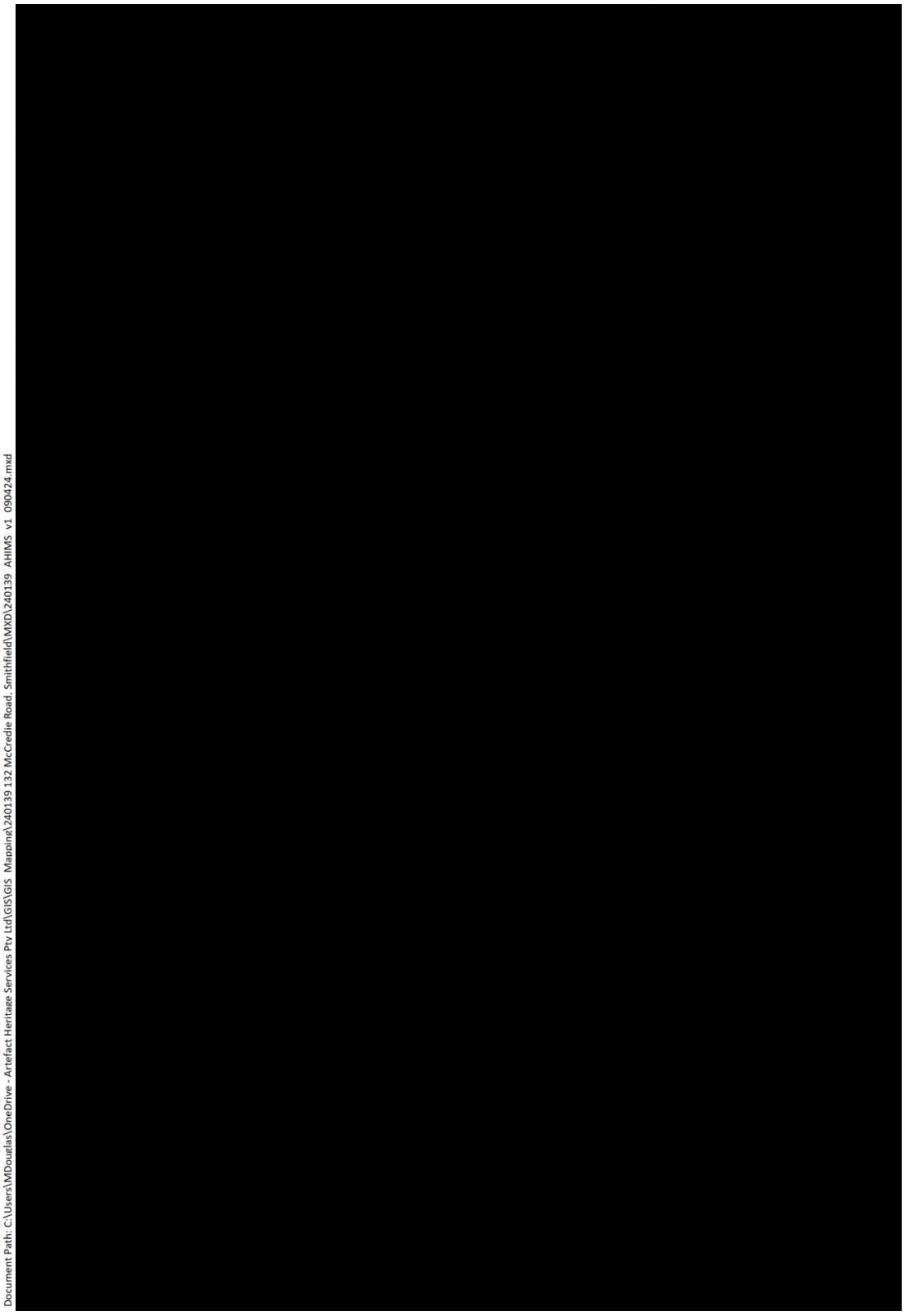
GDA, Zone 56	[redacted]
Buffer	0m
Number of sites (total)	5

The search determined that there are five AHIMS registered sites located within the search area. However, there are no registered sites within the study area boundary. The results of the AHIMS search can be seen in Figure 2. Of the five sites within the search area, four were artefact sites (80%) and the remaining site was a potential archaeological deposit (PAD). However, the site card for this PAD records its status as 'Not a Site' as it was re-evaluated after its initial recording (McIntyre-Tamwoy 2003; Australian Museum Business Services 2008).

The low number of registered sites in this area makes it difficult to interpret past land use. However, this lack of sites does not mean that the search area was not utilised by Aboriginal people. It more likely suggests that evidence of past Aboriginal activity and occupation has been removed or destroyed through intensifying development, which has occurred since the second half of the 20th century.

The few sites that are within the search area are mostly clustered around Prospect Creek or within proximity to a former tributary of the creek. While the limited information here prevents more meaningful statements about site distribution in this area being made, the data does suggest sites are potentially more likely to occur in close proximity to Prospect Creek and remaining or former tributaries. This is a pattern of site distribution which can be seen from across the Cumberland Plain region (White and McDonald 2010).

Figure 2: AHIMS search results



3.4 Environmental background

3.4.1 Soils and geology

The study area is situated on the Berkshire Park soil landscape, which consist of moderate to extremely deep layered sediments featuring sandy loams in upper layers and sand and heavy clays in lower layers (eSpade 2015). Upper stratigraphic layers have the potential to contain *in situ* archaeological deposits; however, this is dependent on levels of erosion and ground disturbance. Berkshire Park soils have a low to moderate risk of erosions, but during periods of flooding or concentrated fluvial flow there is a much greater risk of erosion (eSpade 2015), which could remove or displace potential artefacts.

Guildford West is situated within the Cumberland Plain, a region predominated by low rolling hills and wide valleys. The study area is known to contain three specific geological formations: the St Marys, Rickabys Creek and Londonderry Clay formations. To varying degrees, these three formations are composed of silcrete, indurate mudstone, tuff and quartzite (Mary Dallas Consulting Archaeologists 2017; RPS 2016), which, due to erosion, are present as surface exposures across the Berkshire Park landscape. These stone materials were valued by Aboriginal groups for their utility in stone tool manufacture, and their presence in an area is often a strong indicator for potential Aboriginal activity.

3.4.2 Hydrology and landforms

The study area is located within approximately 100m of Prospect Creek, a major tributary of the Georges River. Within the Cumberland Plain, proximity to fresh water is strongly correlated with Aboriginal occupation, and this is supported by studies focusing on this region (White and McDonald 2010).

The study area is situated on a terrace, which gently slopes down towards the Prospect Creek in the south. The flatness of the site and the surrounding region means that rocky outcrops suitable as shelters are rare and also that there no drainage lines present. These topographic characteristics suggest that any sites within the study area will be open sites and that they are more likely to be towards the southern end of the study area, due to its proximity to the creek.

3.4.3 Historic land disturbance

Historic aerial photographs demonstrate that the study area remained undeveloped, beyond a house in the south west corner of the site until at least 1965 (Figure 3 & Figure 4). These images seem to suggest that the site was used for low-intensity agricultural purposes, most likely for livestock grazing, which is consistent with the agricultural activities occurring across this region in the early to mid-20th century. However, by 1975, the site had been developed into what appears to be an industrial facility (Figure 5). The construction of this facility, which takes up a significant portion of the property, would have caused significant levels of disturbance to ground surfaces, which is likely to have destroyed or displaced Aboriginal objects which may have been present at the site. Moreover, subsequent developments within the study area during the following decades have increased levels of ground disturbance, further diminishing the likelihood of Aboriginal objects or sites being present.

Figure 3: 1943 aerial photograph

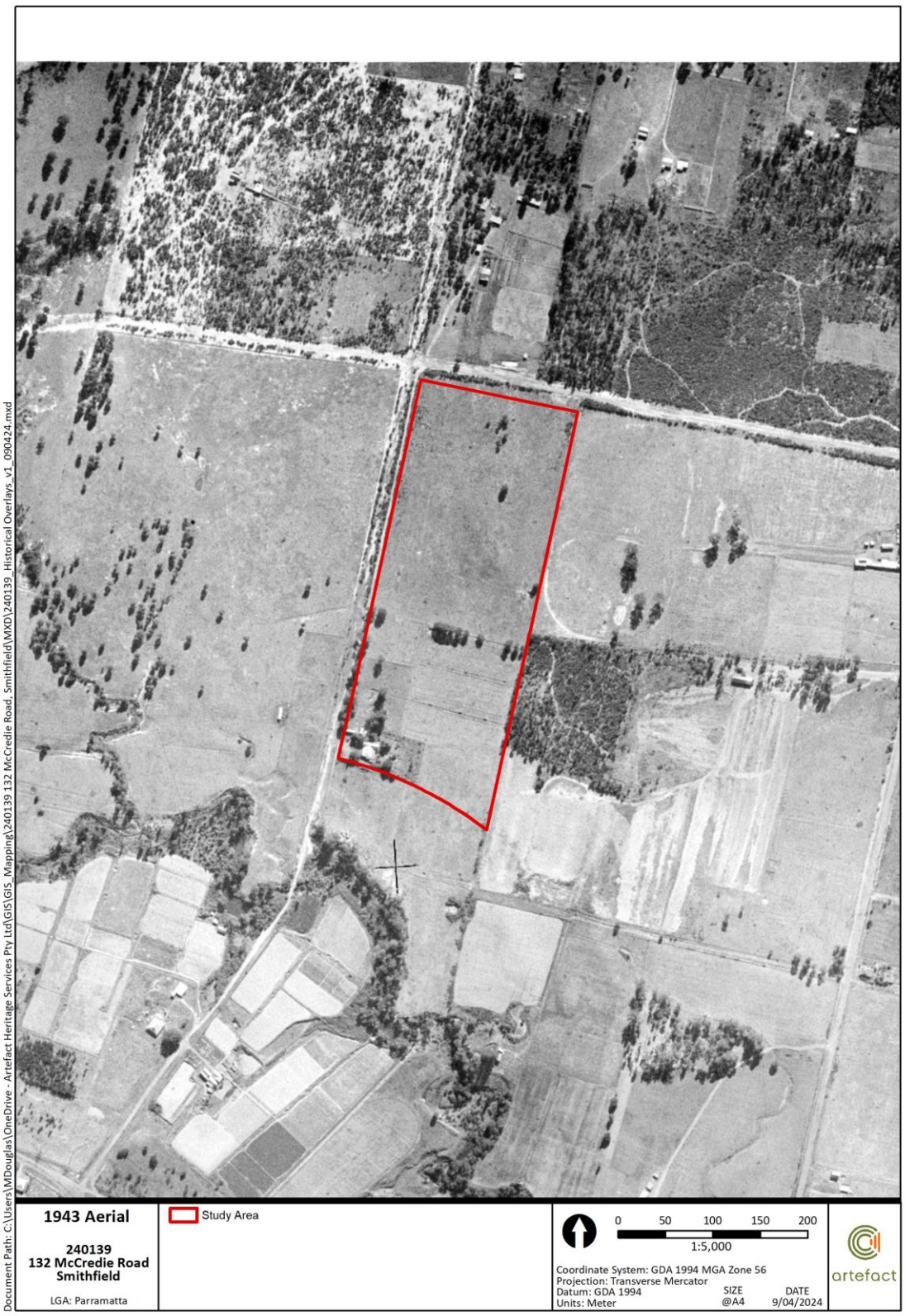


Figure 4: 1965 aerial photograph

Figure 5: 1974 aerial photograph

3.5 Predictive model

A predictive model for the study area was prepared in the Archaeological Survey Report (ASR) conducted for this project. This model synthesised the results of desktop research, landscape context and previous archaeological reports from the surrounding region. This predictive model stated:

- The most likely site types to occur within the study area are stone artefact sites, consisting of either artefact scatters or isolated finds
- It is expected that any such sites would be located within the southern portion of the study area, which is closest to Prospect Creek
- Aboriginal artefacts may be present either on the surface or within the soil profile in potential archaeological deposits (PADs) – that is, areas with the potential to contain subsurface Aboriginal objects – although this is dependent on levels of ground disturbance
- The highly disturbed nature of the site means that it is unlikely that Aboriginal objects or areas of archaeological potential will be identified

4.0 SUMMARY OF FIELD INVESTIGATIONS

A survey of the study area was conducted by Artefact as part of the ASR for this project on 24 April 2024 by Gareth Holes (Senior Heritage Consultant, Artefact), Johnny Love (Heritage Consultant, Artefact) and Darren Duncan (Site Officer, Gandangara LALC). A full coverage pedestrian archaeological survey of the study area was conducted in accordance with the *Code of Practice* (DECCW 2010). All ground exposures were examined for Aboriginal objects and trees were examined for signs of cultural scarring and marking. A handheld GPS was used to track the path of the survey team and record coordinates in the event that any Aboriginal sites or areas of interest were identified. A photographic record was kept during the site inspection and scales were used for photographs where appropriate.

The archaeological survey conducted as part of this assessment confirmed that the study area has been subjected to significant levels of disturbance. This disturbance was associated with the previous usage of the site, removal of former structures and remediation works, the installation of services, and land clearing. The predictive model established earlier in this report identified that Aboriginal objects were unlikely to be present within the study area based on the extensive levels of disturbance the site has been subjected to. No evidence of Aboriginal objects or sites were identified within any of the survey units.

The predictive model stated that if Aboriginal objects or sites were to be present, they would most likely be located in the southern portion of the study area, which is closest to Prospect Creek. This area, identified as Survey Unit 3 in this report, was found to have been disturbed by levelling and topsoil clearance. The presence of mounds of spoil associated with these activities allowed for some insight into the subsurface composition of this survey unit. No artefacts were observed within these mounds, and large areas of ground exposure confirmed that topsoils had largely been stripped away and that clays were evident. This also indicates that there is little potential for subsurface archaeological deposits to be present within this or any other survey unit, given that land clearing activities and other forms of ground disturbance were evident across the site.

The analysis of existing archaeological studies for the Cumberland Plan and the region around the study area emphasised that Aboriginal sites are largely concentrated within 50-100m of permanent watercourses (White and McDonald 2010). However, it is important to note that the disturbance evidenced within this site is likely to have removed any Aboriginal objects or sites which may have been present. This level of disturbance is a common around the Guildford West area and has been noted in other archaeological studies discussed previously.

5.0 CULTURAL HERITAGE VALUES

5.1 Methodology

The cultural assessment in this report includes information collected through desktop assessment, archaeological survey and Aboriginal community consultation undertaken in accordance with the Consultation Requirements. This information was collected by Sammuel Sammut (Heritage Consultant, Artefact Heritage).

5.1.1 Cultural landscape

The World Heritage Convention of United Nations Educational, Scientific and Cultural Organisation (UNESCO) defines a cultural landscape as one which has 'powerful religious, artistic or cultural associations of the natural element rather than material cultural evidence, which may be insignificant or even absent' (UNESCO 1991). The relationship between Aboriginal Australians and the land is conceived in spiritual terms rather than primarily in material terms (Andrews et al 2006). Aboriginal cultural knowledge has been defined as:

> *Accumulated knowledge which encompasses spiritual relationships, relationships with the natural environment and the sustainable use of natural resources, and relationships between people, which are reflected in language, narratives, social organisation, values, beliefs and cultural laws and custom (Andrews et al 2006).*

Aboriginal cultural knowledge was traditionally bequeathed through oral traditions from generation to generation. Within all Aboriginal communities there was a time of dislocation and upheaval associated with the arrival of colonial settlers. This widespread disruption resulted in much of the detailed knowledge and understanding of many of the elements of the cultural landscape being lost from the Aboriginal community, nonetheless many Aboriginal people maintain a strong connection to the land of their ancestors and collectively possess a wealth of knowledge passed down through the generations.

5.1.2 Types of values

Aboriginal people hold significant knowledge about traditional use of land before and after contact. The landscape which encompasses the study area has cultural value of importance to the Aboriginal community. The Aboriginal community collectively holds values and knowledge that relate to:

- Traditional values: these are passed down by family and community as part of ancient tradition.
- Historical values: these are passed down by family and community and relate to the eras since colonisation; these may include information gained from historical source documents.
- Contemporary values: these are values of modern importance and relevance for Aboriginal stakeholder groups.

There is often no clear separation between these values, and they collectively co-exist with equal importance in forming the value that Aboriginal people place on landscape, cultural heritage, intangible heritage, and particular landforms or parts of the landscape.

5.2 Identified Aboriginal cultural heritage values

Table 6 provides a summary of identified Aboriginal cultural heritage values.

Table 6: Cultural heritage values identified for the study and surroundings

Cultural heritage value	Description	Source
Watercourses	Watercourses are important to Aboriginal people for their connection to Country as well as for the resources they provide.	ASR (11.0 Appendix A)
Aboriginal occupation of Cumberland Plain	Aboriginal people have a long and rich history within the Cumberland Plain, which continues to this day. Many Aboriginal people say they have been living on Country for 'time immemorial' and that they have a deep connection to the land.	ASR (11.0 Appendix A)

5.3 Aboriginal cultural values within the study area

Scientific studies have demonstrated that Aboriginal people have lived in the Cumberland Plain area for tens of thousands of years, while many Aboriginal people themselves say they have been living on country since 'time immemorial'. This depth of time has resulted in Aboriginal people having a deep connection to the land, and a sacred duty to protect it. Within the local area watercourses have repeatedly been highlighted as important to Aboriginal people, such as the nearby Prospect Creek, which is known to be associated with Aboriginal sites. While the local area is significant to Aboriginal people both through their connection with the land and for the presence of Aboriginal objects, no specific cultural values have been identified associated with the study area. In addition, due to the level of disturbance it is unlikely that any Aboriginal objects that hold cultural significance are present within the study area, 132 McCredie Road.

6.0 SIGNIFICANCE ASSESSMENT

A significance assessment of the scientific, social, historic and aesthetic values of the study area is included below.

6.1 Significance assessment criteria

An assessment of the cultural heritage significance of an item or place is required in order to form the basis of its management. The Guide (OEH 2011: 10) provides guidelines, in accordance with the Burra Charter (Australia ICOMOS 2013) for significance assessment with assessments being required to consider the following criteria:

- Social values – does the area have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons
- Historic values – is the area important to the cultural or natural history of the local area and/or region and/or state
- Scientific values - does the area have the potential to yield information that will contribute to an understanding of the cultural and natural history of the local area and/or region and/or state
- Aesthetic values – is the area important in demonstrating aesthetic characteristics in the local area and/or region and/or state.

Scientific values should be considered in light of the following criteria:

- Research potential - does the evidence suggest any potential to contribute to an understanding of the area and/or region and/or state's natural and cultural history?
- Representativeness - how much variability (outside and/or inside the subject area) exists, what is already conserved, how much connectivity is there?
- Rarity - is the subject area important in demonstrating a distinctive way of life, custom, process, land-use, function or design no longer practised? Is it in danger of being lost or of exceptional interest?
- Education potential - does the subject area contain teaching sites or sites that might have teaching potential?

It is important to note that heritage significance is a dynamic value.

6.1.1 Historic value

Historic values refer to the association of place with aspect of Aboriginal history. Historic values are not necessarily reflected in physical objects, but may be intangible and relate to memories, stories, or experiences.

No Aboriginal objects or sites have been identified within the study area and it is assessed as being unlikely that any are present. Therefore, no Aboriginal historic values have been identified.

6.1.2 Aesthetic value

Aesthetic values refer to the sensory, scenic, architectural, and creative aspects of the place. These values may be related to the landscape and are often closely associated with social/cultural values.

No Aboriginal objects or sites have been identified within the study area and it is assessed as being unlikely that any are present. Therefore, no Aboriginal aesthetic values have been identified.

6.1.3 Socio/cultural value

Socio/cultural heritage values should be addressed by Aboriginal people who have a connection to, or interest in, the area.

No Aboriginal objects or sites have been identified within the study area and it is assessed as being unlikely that any are present. Therefore, no Aboriginal socio/cultural values have been identified.

6.1.4 Scientific value

Scientific value refers to a site's potential to contribute to our understanding and information. As no Aboriginal objects or sites were identified during archaeological survey, there are no scientific values for the study area.

6.2 Statement of significance

Significance is determined in relation to Aboriginal objects. As no Aboriginal objects or areas of subsurface archaeological potential have been identified through this assessment, the study area does not hold specific aesthetic, cultural, scientific, or sociocultural significance. The study area does hold broad cultural value associated with the Aboriginal occupation within the Cumberland Plain and regarding its proximity to Prospect Creek.

7.0 IMPACT ASSESSMENT

7.1 Proposed works

The proposed development comprises:

- Site preparation works including bulk excavation and removal of existing hard standing and structures on the site, tree and vegetation clearing, and bulk earthworks;
- Construction, fit out and operation of a data centre with an approximate building height of 25.77m and total gross floor area of 29,444 m2 comprising:
    - At-grade parking for 53 car parking spaces and 2 accessible car parking spaces
    - Two (2) loading dock spaces.
    - Two (2) levels of technical data hall floor space with incorporating a total of nine (9) data halls
    - Ancillary office space
- Provision of required utilities, including:
    - Fuel storage
    - Two (2) Switch-rooms
    - Four (4) Industrial water storage tanks
- Vehicle entry and egress driveways located along McCredie Road
- Internal access road
- Associated landscaping and site servicing
- Installation of services and drainage infrastructure.

7.2 Aboriginal heritage impact

No Aboriginal objects or sites were identified within the study area, and there is no evidence to suggest that the site possesses any archaeological potential. As such, the proposed works will not have any impact to Aboriginal heritage.

7.3 Ecological Sustainable Development principles

The Guide (OEH 2011) specifies that Ecological Sustainable Development (ESD) principles must be considered when assessing harm and recommending mitigation measures in relation to Aboriginal objects.

The following relevant ESD principles are outlined in Section 3A of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*:

- Decision-making processes should effectively integrate both long term and short term economic, environmental, social and equitable considerations (the ‘integration principle’)

- If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (the 'precautionary principle')
- The present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations (the 'principle of intergenerational equity').

7.3.1 The integration principle

Decision making processes should effectively integrate both long term and short term economic, environmental, social and equitable considerations (the 'integration principle'). The preparation of this ACHAR demonstrates regard for the integration principle by considering Aboriginal heritage values and impacts to these from the proposal during the planning phase. The nature of the proposal is in itself one that contributes to the long term economic and social needs of current and future residents of the area.

7.3.2 The precautionary principle

If there are threats of serious or irreversible environmental damage, lack of full scientific confidence should not be used as a reason for postponing measures to prevent environmental degradation (the 'precautionary principle'). Investigation for this report (including the ASR) has been undertaken in accordance with the Code of Practice and has therefore met industry standards for scientific confidence that no archaeological sites are present in the study area.

7.3.3 The principle of intergenerational equity

The proposed works would adhere, as close as possible, to the principle of intergenerational equity by collating scientific and cultural information on former Aboriginal occupation of the study area through the previous investigations and this ACHAR. The ASR prepared an assessment of the study area and synthesised the regional character of Aboriginal objects and sites for posterity and future generations.

7.4 Cumulative impacts

A cumulative impact is an impact on Aboriginal cultural heritage resulting from the incremental impact of the action/s of a development when added to other past, present and reasonably foreseeable future actions.

Aboriginal archaeology is by nature an irreplaceable resource and as such any harm to Aboriginal archaeology will have cumulative impacts. As no Aboriginal sites or objects have been identified in the study area, there are no impacts to tangible heritage and no further archaeological investigation is recommended. Management and mitigation measures are outlined in Section 8.0.

Regarding intangible heritage, Aboriginal people have been significantly impacted by land dispossession and the impacts of colonisation. Development has altered the landscape and impacted intangible heritage through the disruption and loss of landscape features, views and other elements. The proposed works entail a minor impact to intangible values, given the small subsurface impacts in a landform that has previously been stripped and modified. However, it is acknowledged that wider ongoing development presents a significant cumulative impact to broader intangible values.

8.0 MANAGEMENT AND MITIGATION MEASURES

8.1 Guiding principles

The overall guiding principle for cultural heritage management is that where possible Aboriginal sites should be conserved.

Where unavoidable impacts occur then measures to mitigate and manage impacts are proposed. Mitigation measures primarily concern preserving the heritage values of sites beyond the physical existence of the site. The most common methods involve detailed recording of Aboriginal objects, archaeological test and salvage excavations, artefact analysis and, where appropriate, reburial of Aboriginal objects in a location determined by the RAPs.

Mitigation measures vary depending on the assessment of archaeological significance of a particular Aboriginal site and are based on its research potential, rarity, representatives and educational value. In general, the significance of a site would influence the choice of preferred conservation outcomes and appropriate mitigation measures, usually on the following basis:

- Low archaeological significance – conservation where possible. SSD Conditions of Approval would be required to impact the site before work can commence
- Moderate archaeological significance – conservation where possible. If conservation was not practicable, further archaeological investigation would be required such as salvage excavations or surface collection in accordance with the SSD Conditions of Approval.
- High archaeological significance – conservation as a priority. Where all other practical alternatives have been discounted mitigation measured such as comprehensive salvage excavations in accordance with the SSD Conditions of Approval would be required.

Sites of unknown scientific value should be conserved where possible. Where conservation is not practical further investigation under the Code of Practice will be required to confirm the presence of Aboriginal objects and gather enough information to assess significance. Test excavation is not a mitigation measure, it is an investigatory action required to gather enough information to inform the development of appropriate mitigation measures.

No Aboriginal objects were identified within the study area and it is unlikely that any unknown Aboriginal objects are present within the study area. However ongoing management and mitigation measures should be undertaken, including:

- Ongoing consultation with registered Aboriginal parties must continue
- An unexpected finds procedure must be prepared
- Heritage inductions must be prepared

8.2 Ongoing consultation with RAPs

Consultation with the RAPs is continuing. Following the unexpected finds policy below, consultation with Aboriginal parties will continue at completion of the ACHAR.

8.3 Unexpected finds policy

An unexpected finds policy must be prepared in the event of any unexpected finds of Aboriginal sites, objects, or archaeological deposits are identified during construction.

8.4 Heritage inductions

An Aboriginal heritage induction must be prepared by a suitably qualified archaeologist and provided to contractors working on the project prior to works commencement. The heritage induction must include summary of the Aboriginal background of the site, legislation and the unexpected finds policy.

8.5 Changes to the project area

Advice provided within this ACHAR is based upon the most recent information provided by the proponent at the time of writing. Any changes made to the project should be assessed by an archaeologist in consultation with the RAPs. Any changes that may impact on Aboriginal sites not assessed as part of the project may warrant further investigation and result in changes to the recommended management and mitigation measures.

9.0 CONCLUSION

9.1 Overview of findings

This assessment found that:

- There are no AHIMS sites located within the study area;
- The study area has been subjected to significant levels of disturbance from development, services installation, land clearing and remediation works;
- No Aboriginal objects or sites were identified during the survey, nor were any area or archaeological potential; and
- The proposed works are unlikely to result in any impacts to Aboriginal heritage.

9.2 Recommendations

Based on the findings of this assessment, it is recommended that:

- No further Aboriginal heritage assessment is required for the works to proceed. However, if changes are made to the proposal that will result in impacts to areas not assessed by this report, additional Aboriginal heritage assessment may be required
- An Unexpected Finds Policy for the works must be prepared
- To support the Unexpected Finds Policy consultation with RAPs must be maintained
- A Heritage Induction must be prepared and presented to all site workers

10.0 REFERENCES

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11.0 APPENDIX A – TECHNICAL REPORT

12.0 APPENDIX B – CONSULTATION RECORDS

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