600 Woodstock Avenue, Rooty Hill

Draft Aboriginal Cultural Heritage Assessment Report

Report to Project Strategy

Public Version

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artefact

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EXECUTIVE SUMMARY

Project Strategy has engaged Artefact to prepare an Aboriginal Cultural Heritage Assessment report (ACHAR) for the development of a Western Sydney Material Recovery Facility (MRF) operated by Cleanaway at 600 Woodstock Road (Lot 67, DP 804292), Rooty Hill, NSW 2766. The proposal will provide public benefit by delivering a purpose-built recycling facility for the local area, meaning capacity for recycling of waste materials is significantly enhanced and will contribute to environmental sustainability outcomes in the local area. The proposals will also directly create new construction and operational jobs in the locality that will contribute to the local economy. It will also create new in-direct jobs through the strengthening of the recycling supply chain in Australia. The proposal will include the demolition of existing structures and construction of a Materials Recycling Facility with capacity to process up to 120,000 tonnes per annum (TPA), ancillary office space and facilities, on-site parking and associated works including excavation and landscaping.

The proposal was granted status as a State Significant Development (SSD-29999239) under part 4.1 of the *Environmental Planning and Assessment Act 1979*. on 9 November 2021. The Secretaries Environmental Assessment Requirements (SEARs) require an ACHAR be carried out. Artefact Heritage has been engaged by Project Strategy to provide an ACHAR to support the Environmental Impact Statement (EIS) to be submitted to Department of Planning, Industry and Environment (DPIE). The aim of this ACHAR is to identify Aboriginal cultural heritage values within the study area, conduct consultation with Aboriginal stakeholder groups and to assess impacts to Aboriginal heritage that may result from the proposal.

The study area is located within Blacktown Local Government Area (LGA) and lies within the boundaries of the Deerubbin Local Aboriginal Land Council (LALC).

The consultation process has commenced and relevant agencies have been contacted to provide list of individuals and organisations who may have an interest in the Rooty Hill area. An advertisement has also been placed in the Koori Mail seeking interested parties. The consultation process is ongoing.

Overview of findings

The following results and recommendations are based on consideration of:

- The requirements of Aboriginal heritage guidelines including:
  - *The Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010a) – known as *The Code of Practice*
  - Guide to investigating and assessing and reporting on Aboriginal Cultural Heritage in New South Wales (OEH 2011) – known as ACHAR guidelines.
  - *The Aboriginal Cultural Heritage consultation requirements for proponents 2010* (OEH 2010b)- known as Consultation Guidelines)
- SEARs (Department of Planning, Industry and Environment in December 2020).
- The results of background research and an archaeological site survey

The assessment found that:

- No previously unrecorded Aboriginal sites or objects were identified within the study area during the site inspection.
- After physical examination of the study area and examination of historical aerial photography the study area has been assessed as having nil to low potential to retain intact archaeological deposits
- Consultation with RAPS established that there were….

1.1 Recommendations

Based on the results of this assessment and in accordance with Aboriginal heritage guidelines mandated in the SEARs for the proposal, the following recommendations are made:

- As the study area was found to be disturbed and to have a nil-low potential for Aboriginal objects to be located within it, it is recommended that further archaeological assessment is not required.
- The result of the consultation …… to be established
- If changes are made to the proposal that may result in impacts to areas not assessed by this ACHAR further assessment would be required.
- Unexpected Aboriginal objects remain protected by the *National Parks and Wildlife Act 1974*. If any such objects, or potential objects, are uncovered in the course of the activity, all work in the vicinity should cease immediately. A qualified archaeologist should be contacted to assess the find and Heritage NSW and Metropolitan LALC must be notified.
- If human remains, or suspected human remains, are found in the course of the activity, all work in the vicinity should cease, the site should be secured, and the NSW Police and Heritage NSW should be notified.

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2.0 INTRODUCTION

2.1 Proposal background

Project Strategy has engaged Artefact to prepare an Aboriginal Cultural Heritage Assessment report (ACHAR) for the development of a Western Sydney Material Recovery Facility (MRF) operated by Cleanaway at 600 Woodstock Road (Lot 67, DP 804292), Rooty Hill, NSW 2766. The proposal will provide public benefit by delivering a purpose-built recycling facility for the local area, meaning capacity for recycling of waste materials is significantly enhanced and will contribute to environmental sustainability outcomes in the local area. The proposals will also directly create new construction and operational jobs in the locality that will contribute to the local economy. It will also create new in-direct jobs through the strengthening of the recycling supply chain in Australia. The proposal will include the demolition of existing structures and construction of a Materials Recycling Facility with capacity to process up to 120,000 tonnes per annum (TPA), ancillary office space and facilities, on-site parking and associated works including excavation and landscaping.

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The study area is located within Blacktown Local Government Area (LGA) and lies within the boundaries of the Deerubbin Local Aboriginal Land Council (LALC).

Consultation with registered Aboriginal parties (RAPs) has commenced and is ongoing for the proposal.

2.2 Location

The study area (Lot 67, DP 804292) consists of a 1.97 hectare property bounded by industrial properties to the east, Woodstock Avenue to the north, and Kellogg Road to the west and south. It is located within the City of Blacktown LGA, within the Parish of Rooty Hill and County of Cumberland. They study area is located within the boundaries of the Deerubbin LALC.

Figure 1. Map of the study area

2.2.1 Local context of the proposal

The proposal consists of the demolition of the existing structures and construction of a Materials Recycling Facility with capacity to process up to 120,000 tonnes per annum (TPA), ancillary office space and facilities, on-site parking and associated works including excavation and landscaping. The proposal will provide a number of benefits to the local area:

- **Enhanced sustainability outcomes for the local area**
  - The proposed facility is deliberately located within the area it will be servicing, meaning that further sustainability outcomes are achieved through the reduction in truck movements over long distances, therefore minimising the supply chain distances and ecological footprint associated with vehicle movements, emissions and noise pollution.
- **Complement existing Cleanaway assets**
  - The proposed materials recycling facility is to be operated by Cleanaway. Whilst the proposal will not contain vehicle storage, the proposal will benefit from close proximity to an existing Cleanaway truck storage facility located in Glendenning. This agglomeration of assets means the proposed materials recycling facility can be compact and still minimise truck movement across the local area.
- **Enhanced streetscape**
  - The proposal will facilitate the renewal of the site, with improved address to the streetscape through new built form and additional tree planting to provide screening along Kellogg Road. The proposal will also incorporate public art on the frontage to Kellogg Road to provide visual interest.
- **Reduced heat island effect**
  - The proposal includes new landscaping along its street frontages to soften its interface to the streetscape. The proposed tree planting and increase in landscaping on site will also contribute to reducing the heat island effect in the locality.

2.3 Overview of the proposal

The proposal comprises the redevelopment of the site as summarised below:

- Demolition of existing structures.
- Construction and operation of a purpose-built Materials Recycling Facility comprising a total of 7,572m² gross floor area, including:
  - Maximum building height of RL 57.83m.
  - Warehouse space: 6,732m²
  - Office space (across two levels) and amenities: 840m²
  - Capacity to process up to 120,000 TPA
- Car parking provided on-site: 40 car spaces
- Hard and soft landscaping
- Building identification signage

Figure 2. Proposed Development of Study area: Courtesy of Project Strategy.

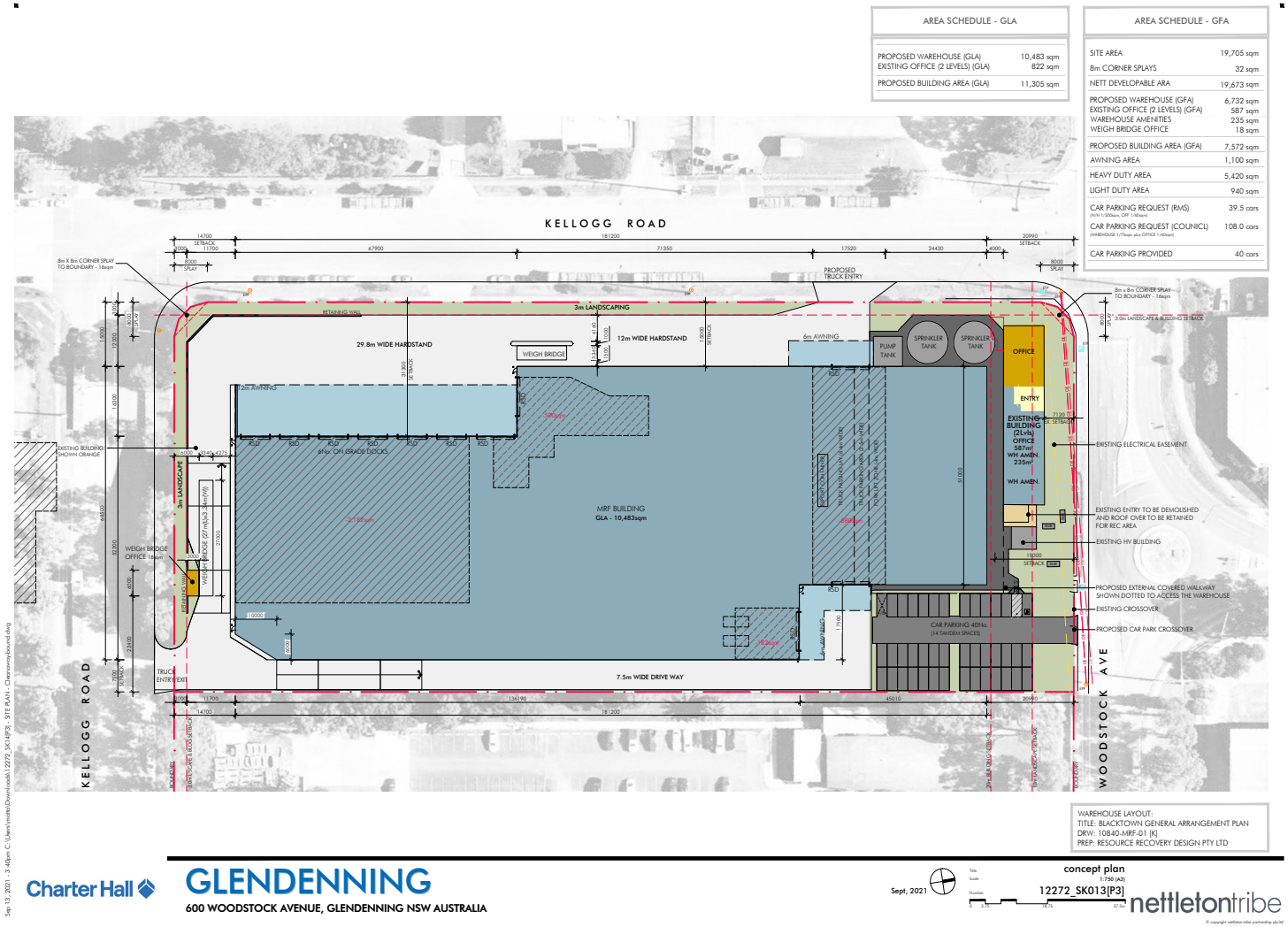

Figure 3. Architects Rendering of proposed development (Client's documentation).

Figure 4. Architects Rendering of proposed development (Client's documentation).

2.4 Purpose and scope of the report

Artefact Heritage has been engaged to prepare an ACHAR for inclusion in the proposal EIS. This ACHAR considers the construction impacts on Aboriginal cultural heritage and potential archaeological resources within the study area and includes:

- Assessment of the Aboriginal cultural heritage values of the study area and identification of any specific areas of cultural significance
- Assessment of archaeological potential for the study area
- Aboriginal stakeholder consultation
- Preparation of a methodology for archaeological management including test excavation and salvage where required.

2.5 Secretary's Environmental Assessment Requirements

The SEARs for this proposal were issued on 9 November 2021 (SSD-29999239) and require an ACHAR to be prepared in accordance with the *Code of Practice for Archaeological Investigation in NSW* (DECCW 2010) and guided by the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales* (OEH 2011). The requirements of the ACHAR are detailed in Table 1.

Table 1. Secretary's Environmental Assessment Requirements

Item	Secretary's Environmental Assessment Requirements	Where addressed in this report
1	*Identify, describe, and assess impacts on the Aboriginal cultural heritage values that exist across the development*	This report
2	*Provide evidence and details of consultation with Aboriginal people*	Section 4 and appendices
3	*Include results of a surface survey and any test excavations*	Section 7 (TBC)
4	*Include an unexpected finds protocol*	Section 10

2.6 Authorship

This report was prepared by Brye Marshall (Heritage Consultant) and Elizabeth Bonshek (Senior Heritage Consultant). Management input and review was provided by Sandra Wallace (Director).

3.0 LEGISLATIVE CONTEXT

3.1 Introduction

There are several pieces of legislation that are relevant to the assessment of Aboriginal cultural heritage for the proposal. This chapter provides a summary of these Acts and the potential implications for the proposal.

3.2 NSW National Parks and Wildlife Act 1974

The *National Parks and Wildlife Act* (NPW Act) provides statutory protection to all Aboriginal places and objects. An Aboriginal Place is declared by the Minister, under Section 84 of the NPW Act in recognition of its special significance with respect to Aboriginal culture. Under Section 86 of the NPW Act Aboriginal objects and Aboriginal Places are protected. An Aboriginal object is defined as:

> *any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction and includes Aboriginal remains.*

The protection provided to Aboriginal objects applies irrespective of the level of their significance or issues of land tenure. However, areas are only gazetted as Aboriginal places if the Minister is satisfied that sufficient evidence exists to demonstrate that the location was and/or is of special significance to Aboriginal culture.

There are no gazetted Aboriginal places in the study area. All Aboriginal objects, whether recorded or not, are protected under the NPW Act.

However, as the proposal is subject to assessment under Section 4.1of EP&A Act, Schedule 2 of the Environmental Planning and Assessment Regulation 2000, permits allowing harm to Aboriginal objects issued under the NPW Act.

3.2.1 National Parks and Wildlife Regulation 2019

Under the authority of the NPW Act, the National Parks and Wildlife Regulation 2019 provides regulations for Aboriginal heritage assessment and consultation with registered Aboriginal parties.

Part 5 (Division 2) of the National Parks and Wildlife Regulation sets out the requirements of a due diligence assessment process and provides requirements for more detailed assessment and consultation with registered Aboriginal parties for activities that may result in harm to Aboriginal objects. This includes:

- Clause 60 – consultation process to be carried out before application for Aboriginal heritage impact permit
- Clause 61 – application for Aboriginal heritage impact permit to be accompanied by cultural heritage assessment report.

In order to comply with Clause 60 and 61 of the National Parks and Wildlife Regulation 2019, preparation of an ACHAR and consultation with RAPs must be in accordance with the following guidelines:

- Code of Practice (DECCW 2010a)
- ACHAR guidelines (OEH 2011)
- Consultation guidelines (DECCW 2010b).

The current assessment is being carried out in accordance with the above guidelines in order to meet the SEARs which refer to them.

3.3 NSW Environmental Planning and Assessment Act 1979

The EP&A Act provides planning controls and requirements for environmental assessment in the development approval process. The EP&A Act consists of three main parts of direct relevance to Aboriginal cultural heritage: Part 3 which governs the preparation of planning instruments; Part 4 which relates to development requiring consent; and Part 5 which relates to activity that does not require consent.

The proposal has been subject to assessment and approval by the NSW Minister for Planning and Public Spaces under Part 4 Section Division 4.7 of the EP&A Act, which establishes an assessment and approval regime for SSD.

An EIS supported by the current assessment is being prepared to assess the impacts of the proposal, in accordance with SEARs.

Section 4.12(8) of the EP&A Act provides that environmental planning instruments (such as local environmental plans and SEPPs) do not, with some exceptions, apply to SSD projects. Notwithstanding, the environmental planning instruments that are relevant to the proposal have been considered for consistency, as described below.

3.3.1 Blacktown City Council Local Environmental Plan 2010

Local Environmental Plans (LEPs) are prepared by councils in accordance with the EP&A Act to guide planning divisions for LGAs.

The aim of LEPs in relation to heritage is to conserve the heritage significance listed within this schedule.

The study area falls within the boundaries of Blacktown Council LGA. The Blacktown City Council LEP (2015) Section 5.10.2 Heritage Conservation, Requirement of Consent, articulates that in relation to Aboriginal heritage, consent is mandatory and for any development, the requirements are:

(2) Requirement for consent

Development consent is required for any of the following—

(a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance)—

(i) a heritage item,

(ii) an Aboriginal object,

(iii) a building, work, relic or tree within a heritage conservation area,

(b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,

(c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,

(d) disturbing or excavating an Aboriginal place of heritage significance,

(e) erecting a building on land—

(i) on which a heritage item is located or that is within a heritage conservation area, or

(ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,

(f) subdividing land—

(i) on which a heritage item is located or that is within a heritage conservation area, or

(ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.

3.4 NSW Aboriginal Land Rights Act 1983

The *Aboriginal Land Rights Act* 1983 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:

- Take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law
- Promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area.

The study area is located within the Deerubbin LALC boundaries.

3.5 NSW Native Title Act 1994

The *Native Title Act* 1994 was introduced to work in conjunction with the Commonwealth Native Title Act. Native Title claims, registers and Indigenous Land Use Agreements are administered under the Act.

A search of the Native Title Vision mapping service, provided by the National Native Title Tribunal by Elizabeth Bonshek on 18 May 2021 did not identify any Native Title claims in or around the study area.

3.6 Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The *Environment and Heritage Legislation Amendment Act (No. 1) 2003* amends the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) to include 'national heritage' as a matter of national environmental significance and protects listed places to the fullest extent under the Constitution. It also establishes the National Heritage List and the Commonwealth Heritage List.

The *Australian Heritage Council Act 2003* establishes a new heritage advisory body – the Australian Heritage Council – to the Minister for the Environment and Energy and retains the Register of the National Estate.

The *Australian Heritage Council (Consequential and Transitional Provisions) Act 2003* repeals the *Australian Heritage Commission Act 1975*, amends various Acts as a consequence of this repeal and allows the transition to the current heritage system.

Together the above three Acts provide protection for Australia's natural, Indigenous and non-Indigenous heritage. The new framework includes:

- A new National Heritage List of places of national heritage significance
- A Commonwealth Heritage List of heritage places owned or managed by the Commonwealth
- The creation of the Australian Heritage Council, an independent expert body to advise the Minster on the listing and protection of heritage places
- Continued management of the non-statutory Register of the National Estate.

3.6.1 National Heritage List

The National Heritage List is a list of places with outstanding heritage value to our nation, including places overseas. So important are the heritage values of these places that they are protected under the EPBC Act. This means that a person cannot take an action that has will have, or is likely to have, a significant impact on the national heritage values of a national heritage place without the approval of the Australian Government Minister for the Environment.

There are no items listed on the National Heritage List located within the study area for this assessment.

3.6.2 Commonwealth Heritage List

The Commonwealth Heritage List is a list of places managed or owned by the Australian Government.

There are no items listed on the Commonwealth Heritage List located within the study area for this assessment.

4.0 ABORIGINAL COMMUNITY PARTICIPATION

4.1 Aboriginal consultation

Aboriginal community consultation is being conducted in accordance with the Consultation Requirements.

A consultation log is being maintained which details all correspondence with the registered Aboriginal parties for the proposal.

4.2 Identification of stakeholders and registrations of interest

The consultation for this ACHAR commenced on 8 December 2021

Documentation of the consultation process to date is provided in the Appendix.

In accordance with step 4.1.2 of the Consultation Requirements, Artefact Heritage corresponded with the following organisations by email on the 8 December 2021 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:

- Blacktown LGA
- Heritage NSW
- National Native Title Tribunal
- Office of the Registrar, Aboriginal Land Rights Act 1983
- Native Title Service Corporation (NTSCorp)

The Deerubbin LALC was also emailed.

In addition to this, and in accordance with Step 4.1.3 of the Consultation Requirements, an advertisement was placed in the *Koori Mail* on 15 December 2021, 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.

In accordance with Step 4.1.3 of the Consultation Requirements, on 10 January 2022, emails or letters were sent to all Aboriginal persons or organisations identified through advertisement or through responses from agencies contacted as part of Step 4.1.2. In accordance with Step 4.2 the letters provided details about the location and nature of the proposal, as well as an invitation to register as an Aboriginal stakeholder. 58 invitations were sent out.

All those who respond will be recorded as RAPs. At the end of the registration period, 24 January 2022, eighteen individuals/organisation responded (four responses were lodged after the period of registration had closed). Of these, two requested that their details should not be revealed and one requested that only the organisation's name be used. Table 2 lists the RAPs who responded.

A copy of the assessment methodology was sent to all RAPs by email on 28 January 2022. The assessment methodology requests feedback by the end of 25 February 2022. At the end of this period the names of the RAPs who responded will be documented together with their comments and feedback incorporated. A brief summary responses will be listed in this report (Table 3).

Table 2. Names of groups or individuals registered as RAPs (responses close 24 January). Place holder

Contact	
	Woka Aboriginal Corporation
Lillie Carroll and Paul Boyd	Didge Ngunawal Clan
Julia Narayan	
James Carroll	Bidjawong Aboriginal Corporation
Name withheld	Information withheld
Ryan Johnson	Murra Bidgee Mullangari Aboriginal Corporation
Carolyn Hickey	A1 Indigenous Services
Dean Delponte - Director	Ngunawal Heritage Aboriginal Corporation
Philip Boney	Wailwan Aboriginal Group
Shayne Dickson	Gunjeewong Cultural Heritage Aboriginal Corporation
Rodney Gunther and Barry Gunther	Waawaar Awaa Aboriginal Corporation
Name withheld	Information withheld
Daniel Chalker	Wori Wooilywa
Jennifer Beale/ Lowana	Butucarbin Aboriginal Corporation
Steven Johnson and Krystle Carroll	Ginninderra Aboriginal Corporation
Justine Coplin	Darug Custodian Aboriginal Corporation
Wendy Smith	Gulaga
Clive Freeman	Freeman and Marx

4.3 Review of assessment methodology

The responses of the RAPS to the assessment methodology to date include those listed in Table 3, below together with a summary statement indicating their support or suggestions. This consultation stage has not yet closed.

Table 3. Summary of Aboriginal stakeholder comments on methodology. Place holder

Person/ RAP group	Comment
Lillie Carroll and Paul Boyd, Didge Ngunawal Clan	Supports the methodology.
Name withheld	Supports the methodology.
Rodney Gunther, Waawaar Awaa Aboriginal Corporation	Supports the methodology

4.4 Review of draft Aboriginal Heritage Assessment report

Once the Assessment methodology has received support from the RAPs, a draft of the Aboriginal Heritage Assessment report will be emailed to the RAPs for comment. The RAPs will have 28 days to respond and their feedback will be recorded and presented in summary in Table 4. The draft will be amended according to the RAPs feedback.

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

Person/ RAP group	Comment

5.0 ENVIRONMENTAL CONTEXT

5.1 Geology and soils

The study area is located on the Cumberland Plain, which is typified by an undulating landscape of rolling hills and prominent rises. The geology of the study area is characterised by the Triassic Wianamatta Liverpool Sub-Group. The Liverpool Sub-Group comprises Bringelly Shale over Minchinbury Sandstone and Ashfield Shale and consists of shale and some sandstone beds and outcrops. Local relief is between ten and fifty metres with undulating slopes to below 10% (Bryan 1996).

The study area is located within the Blacktown Soil Landscape (Bannerman & Hazelton 1990: 35-38). It is 40 m above sea level, within a topography consisting of gently undulating rises, with broad crests and ridges. The A horizon of this landscape consists of loam and clay loam, and is usually relatively shallow, about 30 cm in depth, although depths of up to c.60cm can be present in places. While it overlies Wianamatta Group shales and Minchinbury Sandstone, rock outcrops are not present. The location of South Creek Soil Landscape (Figure 5) within approximately 350 m to the east of the study area gives proximity to watercourses (see below).

Figure 5. Approximate location of the study area in the Blacktown Soilscape with South Creek Soilscape located in close proximity.

5.2 Landforms and hydrology

The study area, 40 m above sea level, lies adjacent to the South Creek Soil Landscape which is an active floodplain with many drainage networks across the Cumberland Plain (Bannerman & Hazelton 1990: 92-95). The topography, consisting of floodplains, valley flats and drainage depressions, is usually flat with occasional terraces or levees and incised channels. The A horizon consists of a sandy loam to sandy clay loam and can be up to approximately 650 mm in depth, overlying clay. The underlying geology is described as Quaternary alluvium. This is an active landscape, subject to erosion and deposition of sediment.

The region has a dense network of north flowing drainage channels. In relation to the study area, the Eastern Creek is located approximately 470 m away, winding it way along the eastern side of the study area which is also flanked by a second watercourse, Angus Creek, approximately 524 m to the south east of the study area, and which flows into Eastern Creek (Figure 6). A number of ponds are located in the east and south eastern area.

Figure 6. Location of water courses in relation to the study area.

5.3 Vegetation

Vegetation at the time of first British colonisation would have been dominated by forest red gum (*Eucalyptus tereticornis*), narrow-leaved ironbark (*E. crebra*), grey box (*E. moluccana*) and spotted gum (*E. maculate*). Currently, the area is almost completely a cleared open-forest and open-woodland (dry sclerophyll forest) (eSpade Soil Landscapes).

Australian sea levels have varied markedly over the past 10,000 years, from a low point of 15m below current sea levels at approximately 7,900 years ago, to a high point of approximately 1.5m above current sea level. This higher level lasted until about 2,000 years ago. This has resulted in considerable coastline variation over time. Many coastal and riverside areas that are currently dryland were inundated during the time that Aboriginal people have inhabited the continent.

5.4 European history and land use

5.4.1 Early British settlement and pastoralism (1789-1859)

The earliest recorded exploration of the Rooty Hill area by British colonists was performed by Captain Watkin Tench in 1789, with the expedition seeking out more fertile lands for cultivation after Sydney's coast proved unsuited for agricultural purposes. The name Rooty Hill was bestowed by Governor King, who reserved 6000 acres of land in this area to build up the colony's stock supplies. Between 1815 and 1817, the Great Western Road (which would later become the Great Western Highway) was constructed between Emu Plains and Parramatta, and this served as an increasingly important thoroughfare for Rooty Hill.

In 1819, Captain William Minchin was granted 1000 acres of land in Rooty Hill, which lay within the vicinity of the Great Western Road. Minchin used this grant to construct the Minchinbury Estate, and the settlement of Rooty Hill began to spring up around it. By 1859, the Minchinbury Estate was sold to Dr. Charles McKay, and over the ensuing decades the area was subdivided and sold off. While the development occurring at this time was focused around the Minchinbury Estate, which was located approximately a kilometre to the south of the study area, some properties were being established approximately 3 kilometres to the west towards Ropes Creek. However, parish maps from this time do not give any indication of structures being developed within the study area (Figure 7).

5.4.2 Mid-19th to early 20th centuries development (1859-1906)

The subdivision of McKay's land led to a substantial increase in development in Rooty Hill during this period. The available plots of land were developed into residential, commercial and industrial estates to meet the growing demands of Rooty Hill and its surrounding areas, which were developing at a comparable rate.

The Rooty Hill Station was first opened in 1863 to support the growth of railway systems across the greater Sydney region. The Station served as a focal point around which the fledgling settlement gradually developed. Furthermore, it allowed for the transportation of local timber and agricultural products to markets within the wider Sydney region. The significant volume of these local exports and the Station's inability to effectively facilitate them is attested to in a newspaper article from 1870:

> *"there are some hundred of tons of billet wood and sleepers piled up right along the line, so that it is impossible to get near the trucks, either for loading or*

unloading; and as there is no shed or place for stowing away goods, we are obliged to do the best we can at our own risk." (Anon. 1870).

Despite the increase in development around the Station, parish maps demonstrated that the majority of the surrounding area was still being used for agrarian purposes, including the study area (Figure 7).

Figure 7. Rooty Hill Parish, 1917 (source: NSW Land Registry Service, Historical Land Records Viewer, Historical Parish Maps). Study area outlined in red

5.4.3 20th and 21st centuries urban growth (1906-Present)

From 1906 onwards, Rooty Hill continued to expand and develop apace with the surrounding suburbs, which were growing increasingly urbanised and industrialised, and decreasingly agrarian. The area remained predominantly agrarian in 1943, but by at least 1985 the balance had shifted towards an urban/industrial environment.

After being incorporated into the Blacktown Shire in 1906, Rooty Hill came under the jurisdiction of the Municipality of Blacktown when it received that title in 1961, and then ultimately the City of Blacktown in 1979 when it was granted this status.

Aerial images show the study area covered in vegetation (Figure 11) until it was cleared by the late 1970s and the existing building was erected by 1984 (Figure 10. This facilities on the site have been expanded since then to cover most of the study area (Figure 8 and Figure 9) including the addition of a carpark.

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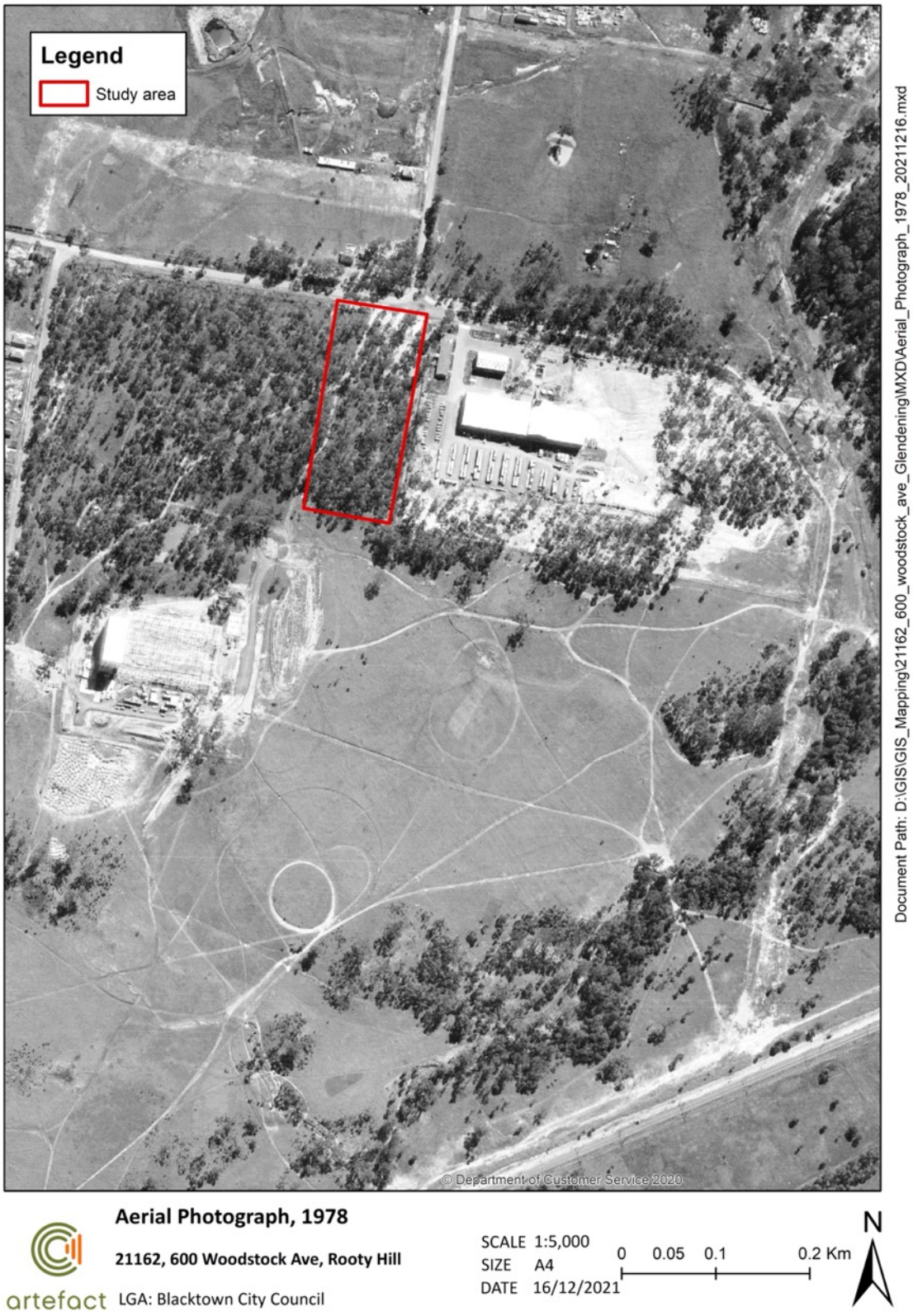
Figure 8: Aerial Photograph of study are 1991: (Source https://portal.spatial.nsw.gov.au/download/historic/4038/4038_07_126.jp2.jpeg)

Figure 9 Aerial Photography of Study area 1986: https://portal.spatial.nsw.gov.au/download/historic/3529/3529_17_082.jp2.jpeg

Figure 10. Historical Image 1984.

Figure 11. Aerial Image 1978:
(https://portal.spatial.nsw.gov.au/download/historic/2707/2707_12_103.jp2.jpeg)



6.0 ARCHAEOLOGICAL AND ETHNOGRAPHIC CONTEXT

6.1 Ethnographic and historical evidence

The language spoken on the Cumberland Plain is known as Darug (Dharruk – alternative spelling). This term was used for the first time in 1900 by Matthews & Everitt (Mathews & Everitt 1900: 265). The Darug language group is thought to have extended from Appin in the south to the Hawkesbury River, west of the Georges River, Parramatta, the Lane Cove River and to Berowra Creek (Attenbrow 2010:34). The area was home to a number of different groups. However, traditional boundaries have primarily been reconstructed based on surviving linguistic evidence and are therefore only approximations: it is difficult to describe social interaction, tribal boundaries and linguistic evidence and any simple way, and it is also that boundaries and interaction across them varied over time.

It is likely that the Darug people enjoyed a subsistence lifestyle moving across the landscape in response to changing seasons and the availability of food and other resources. No doubt trade too affected where and when people travelled (Attenbrow 2010: 78).

Subsistence activities also varied throughout the different regions of the Cumberland Plain, particularly between coastal and inland groups (Brook & Kohen 1991: 3). Coastal groups were observed to rely on resources such as fish and shellfish, whereas inland groups relied more on small animals, plants and freshwater fish and eels (Tench 1793: 230; Kohen 1986: 77). There are many accounts by Europeans of Aboriginal people in canoes on rivers and the ocean, fishing and cooking their catch on small fires within the vessels (e.g. Collins 1798). Banksia flowers, wild honey, varieties of wild yam and Burrawong nut were recorded as important food sources (Collins 1798; Kohen 1985: 9), particularly for inland groups. Small animals such as bandicoots and wallabies were hunted through traps and snares (Kohen 1985: 9). Captain Tench observed the prowess of Darug men in carving toeholds into trees in order to swiftly climb while hunting possums, sometimes supplemented by smoking the animals out with fire (Tench 1793:82).

Plants were an important source of nutrition: common edible species included Macrozamia, a cycad palm with poisonous seeds requiring processing to remove toxins and then ground into a paste; and Xanthorrhoea, also known as the grass tree. The nectar of the grass tree is a high-energy food: in addition, the resin acts as a strong glue for hafting tools while the flower spikes were used for spear barbs. From observations of early European colonists, about 20 species of plant were identified as being used by Aboriginal people of the Sydney region for food or for manufacturing various items (Attenbrow 2010: 41). It is likely this is only a fraction of what was actually used.

British colonisation had a profound and devastating effect on the Aboriginal population of the Sydney region, including Darug speakers. In the early days of the colony, Aboriginal people were disenfranchised from their land as the British claimed areas for settlement and agriculture. The colonists, often at the expense of the local Aboriginal groups, also claimed resources such as pastures, timber, fishing grounds and water sources. But the devastation of Aboriginal culture did not come about through war with the British, but instead through disease and forced removal from traditional lands. It is thought that during the 1789 smallpox epidemic over half of the Aboriginal people of the Sydney region died. The disease spread west to the Darug of the Cumberland Plain and north to the Hawkesbury. This loss of life meant that some of the Aboriginal groups who lived away from the coastal settlement of Sydney may have disappeared entirely before Europeans could observe them or record their clan names (Karskens 2010: 452).

It was not until rural settlement began in the western Cumberland Plain, around 1791 however, that the colonists and Aboriginal people came face to face. Relations quickly disintegrated, and tensions

over land and resources spilled over. Governor King sanctioned the shooting of Aboriginal people in a General Order made in 1801. Intermittent killings on both sides continued for over 15 years, including the Appin massacre and attacks at South Creek in 1816 (Karskens 2010: 225).

Although tensions existed between Aboriginal people and colonialists on the Cumberland Plain, a number of Aboriginal families continued to live semi-traditional lives in the area. In 1805, a meeting was held near Prospect Hill (approximately 5 km away) to discuss an end to the conflict in the local area. The meeting was arranged by Reverend Samuel Marsden, on the suggestion of local Aboriginal groups, and was mediated by a group of Aboriginal women and John Kennedy, a free settler. Marsden's efforts appear to have been seen by some local Aboriginal people as duplicitous, and recent research has shed light on the ongoing war for freedom from colonisation waged by local Aboriginal people (Gapps, 2018).

The government policy of removal of Aboriginal children from their parents in order to assimilate them into white society began fairly early on in the colony's history and was epitomized by the development of the Native Institution at Parramatta in 1814. This facility was moved to the Black Town settlement in 1823, about 7 km west of the current study area. It was closed in 1829 and the land subsequently used for farming (Norman 2015).

An Aboriginal population of considerable size remained in Parramatta and the surrounding locality well into the 1830s. Aboriginal people continue to live in the area and retain cultural associations with their Country.

6.2 Archaeological evidence

Aboriginal people have lived in the Sydney area for more than 36,000 years. The oldest dated site in the greater Sydney region is Cranebrook Terrace which was dated at approximately 41,700 years Before Present (BP) with an error range of 5,000 years (Attenbrow 2010: 18; Karskens 2020). Evidence of Aboriginal occupation has been found dated to 50-60,000 BP at Lake Mungo in NSW, so it is likely that Aboriginal people have lived in the Sydney region for even longer than indicated by the oldest recorded dates we have at present. The archaeological material record provides evidence of this long occupation, but also provides evidence of a dynamic culture that has changed through time.

The existing archaeological record is limited to certain materials and objects that were able to withstand degradation and decay. As a result, the most common type of Aboriginal objects remaining in the archaeological record are stone artefacts. Archaeological analyses of these artefacts in their contexts have provided the basis for the interpretation of change in material culture over time. Technologies used for making tools changed, along with preference of raw material. Different types of tools appeared at certain times, for example ground stone hatchets are first observed in the archaeological record around 4,000 BP in the Sydney region (Attenbrow 2010). It is argued that these changes in material culture were an indication of changes in social organisation and behaviour.

After 8,500 BP silcrete was more dominant as a raw material, and bifacial flaking became the most common technique for tool manufacture. From about 4,000 BP to 1,000 BP backed artefacts appear more frequently. Tool manufacture techniques become more varied and bipolar flaking increases (McDonald 2006). It has been argued that from 1,400 to 1,000 years before contact there is evidence of a decline in tool manufacture. This reduction may be the result of decreased tool making, an increase in the use of organic materials, changes in the way tools were made, or changes in what types of tools were preferred (McDonald 2006). The reduction in evidence coincides with the reduction in frequency of backed blades as a percentage of the assemblage.

Further detail on the archaeological record in the surrounds of the study area will be provided in Section 6.4 below.

6.3 Registered Aboriginal sites

NOTE: 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 5 August 2021 (AHIMS Search ID: 610979).

An area of approximately [redacted] kilometres (east-west) by [redacted] kilometres (north-south) was included in the search. The AHIMS search provides archaeological context for the area and identifies whether any previously recorded Aboriginal sites are located within or near the study area. The parameters of the search were as follows:

GDA 1994 MGA 56	[redacted]
Buffer	0 [redacted]
Number of sites	7
AHIMS Search ID	[redacted]

The distribution of recorded sites within the AHIMS search area is shown in Table 5. Heritage NSW, DPC lists 20 standard site features that can be used to describe a site registered with AHIMS, and more than one feature can be used for each site. The frequency of recorded site types is summarised in Table 5 below. For the 7 sites within the search area, one site feature was recorded. The recorded site features recorded were “Artefact” (n=7).

Table 5: Frequency of recorded site types

Site Feature	Frequency	Percentage
Artefact	7	100%
Total	**7**	**100.00%**

The nature and location of the registered sites is a reflection of the past Aboriginal occupation from which they derive, but is also influenced by historical land-use, and the nature and extent of previous archaeological investigations. Although Aboriginal occupation covered the whole of the landscape, the availability of fresh water and associated resources was a significant factor in repeated and long-term occupation of specific areas within the landscape. Certain site types, such as culturally modified trees, are particularly vulnerable to destruction through historical occupation, while others, such as stone artefacts, are more resilient.

No sites were recorded within the study area (Figure 12), but there are several registered sites [redacted] to the study area. AHIMS artefact [redacted]; [redacted]; [redacted]; [redacted]. The two registered sites closest to the study area are AHIMS [redacted] (approximately [redacted] away) and AHIMS [redacted] (approximately [redacted]) (Figure 12). These are not in the impact zone of the study area but do indicate that there may be Aboriginal sites of significance across the local area.

These sites are described in order of [redacted] to the study area:

6.3.1 West of the study area

AHIMS [redacted], located approximately [redacted] of the study area, was a small open campsite, incorporating red silcrete and indurated mudstone artefacts and was recorded as [redacted]". The campsite was located near [redacted] recorded as lying at the [redacted] and [redacted].

6.3.2 North of the study area (east of Glendenning Road)

AHIMS site [redacted] located approximately [redacted] of the study area, was an open surface scatter, recorded as [redacted]. The scatter was located at the intersection of [redacted] and [redacted], just within the fence line. The scatter included 5 silcrete cores, one quartzite hammerstone and seven silcrete flakes. The site was suggested to be part of a larger site complex extending from [redacted] to the [redacted].

AHIMS site [redacted], located approximately [redacted] of the study area consisted of two stone artefacts, one chert flake 20mm long, 15mmwide and 3mm thick, the second was a yellow mudstone flake, 27mm long, 26mm wide and 6mm thick. It was recorded as [redacted] and was located near [redacted]

AHIMS site [redacted] located approximately [redacted] of the study area, and consisted of an open surface scatter consisting of 60 stone artefacts found on and adjacent to a track extending [redacted]. Most artefacts were silcrete flakes and cores, but a bifacially flaked basalt pebble with anvil pitting and one partially backed silcrete blade, a silcrete scraper and chert and quart flakes were also present. Within [redacted] of the site seven large trees showed symmetrical flake scars up to 60 cm long and were probably evidence of Aboriginal activity. Similar scarred trees were reported on the [redacted] in 1979. This site forms part of a large site complex in the area stretching from either side of [redacted] towards [redacted], see Figure 13). The artefacts were removed from the site in 1985 and the site was destroyed to allow for a road upgrade (AHIMS permit [redacted] 2003) (Source: [redacted]

6.3.3 North of the study area (west of Glendenning Road).

AHIMS site [redacted]; located approximately [redacted] of the study area, and comprised an isolated chert core approximately 68mm long, 62mm wide and 50mm thick. It was recorded as [redacted] and was located at the corner of [redacted] and [redacted].

AHIMS #[redacted] located approximately [redacted] of the study area on the [redacted] side, was an elouera adze flake of basalt (39mm long x 32 mm width and 14 mm thick) of blackish brown colour, weathered displaying no trace of cortex and crude backing, retouch associated with a sharp edge. It was found on the [redacted] of an existing [redacted] abutting the area under study at the corner of [redacted] and [redacted]. There was not visible evidence of Aboriginal occupation within 60m. The site was located [redacted] from [redacted] which constitutes low/medium open forest and disturbed grassland. AHIMS sites [redacted] and [redacted] are discussed by Knight and Kohen (2001) below.

Figure 12: Results of the extensive AHIMS search

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6.4 Previous archaeological investigations

Of immediate relevance to the study area is the archaeological investigation by Knight and Kohen (2001) who discovered two artefacts AHIMS [redacted] and [redacted] (described above) in a [redacted] proximity and [redacted], to the study area, in a location on the [redacted] of [redacted].

Knight, A., J.L. Kohen (2001) "Archaeological survey of the proposed subdivision Lot 12 DP844530, Cnr of Woodstock Avenue and Glendenning Road, Glendenning, NSW". Prepared for Lovegrove Oxley Consultants Pty. Ltd.

This survey work was undertaken in 2000 and focused on a 1.6h property immediately opposite the current study area, on the north side of Woodstock Avenue. The two artefacts were found [redacted] and were so recorded as isolated finds, rather than a scatter. Their study area was described as lying on a gentle slope, close to [redacted]. The northern part of their study area was determined to be disturbed, while the southern part remained relatively undisturbed (based on the native species growing there) although subject to pasture and grazing activities. Soil cores bored in September 2000 revealed sandy, clay loam with heavy clay below. While the subject area remained free of industrial activity, the surrounding area was no longer supported agrarian uses and had been industrialized since 1978 (Knight and Kohen 2001: section 1.7).

The two artefacts found (a chert, Core [redacted] and a Basalt Elouera Adze flake [redacted] were separated by [redacted]. The chert, Core [redacted] was found [redacted] of the [redacted] boundary along [redacted].

The Basalt Elouera Adze flake ([redacted]) was found on the s[redacted] bank of drainage reserve, on the [redacted] side of the study area and lay outside of the subject area boundary. The artefact was removed for analysis and discovered to be a form of basalt occurring in outcrops around the head lands of Kiama and Mt Tomah. Small amounts of the same material had been identified in the Prospect Hill area ([redacted] from study area). The artefact dated to 1,600 years ago. However it was determined the objects were probably contained within fill and were not associated with the site.

The study concluded that there were no implications for development of the study area, but did note the existence or archaeological sensitivity in close proximity to their study area, which had previously been recorded by Kohen (1985). In 1985 Kohen assessed an area of land on either side of Glendenning Road, extending towards Eastern Creek and bounded by Woodstock Avenue, as being archaeologically sensitive (Figure 13). Knight and Kohen (2001) concluded that while the artefacs were likely to have been brought onto their study area within fill, because of the proximity of this area a local origin could not be dismissed. (Knight and Kohen 2001: Section 6).

The study area of report is not located within the area of sensitivity identified by Kohen (1985) and according to the imagery taken in 1986, there are buildings present on the study area. It is likely that Kohen (1985) did not include the area south of Woodstock Avenue because this area had already been built upon.

Figure 13. Areas of archaeological sensitivity along the north side of Woodstock Avenue (Knight and Kohen 2001, original in Kohen 1985).

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Several archaeological investigations have been conducted within the wider Blacktown area: those relevant to the study area are summarised below.

Mills and Kelton 2002 Report on the Archaeological Sub-Surface Testing Program within the Western Sydney Orbital Alignment. Report to NSW Roads and Traffic Authority

In 2002, Mills and Kelton undertook sub-surface investigations prior to the construction of the M7, [redacted] km south of the study area. 328 augers were opened up along the [redacted] boundary of the Eastern Creek floodplain, including low-lying land bordering the floodplain. Although the surface of the site included areas that appeared quite disturbed, test excavation retrieved a total of 83 artefacts from a relatively intact deposit.

This site illustrates that artefactual evidence can be found subsurface in apparently disturbed areas.

Jo McDonald Cultural Heritage Management (2006 – 2011)

Jo McDonald CHM's archaeological investigation of the larger [redacted] included an initial survey and archaeological assessment (2006b), an Indigenous Heritage Impact Statement (2007) and archaeological excavation of a portion of PAD identified in the earlier assessment (2011).

The initial survey and impact statement (2006b and 2007) identified that 52 recorded Aboriginal sites and 5 PADs were located across the [redacted]. A portion of [redacted], north of Bungarribee Creek and approximately 2.5 km south of the study area, was excavated. A total of 41 1m² test pits and 82m² of open area was excavated, yielding a total of 55,353 artefacts.

6.5 Predictive model

Knight and Kohen (2001) presented a summary of the predictive model for this area, first described Kohen (1985). Kohen suggests that there is potential for:

- sites to occur 100 m from creeks and on or near ridge tops
- large camp sites to occur along waterways and larger creeks (such as Eastern and South Creek)
- that small number of artefacts might occur on or near ridgetops, indicating casual visitation
- that the potential for locating sites increases with the proximity of ridges to creeks
- the presence of silcrete may indicate the potential for sites to be found
- that activities undertaken in areas associated with ridges were likely to include the collection of lithic materials and butchering
- that isolated finds might occur in any environmental zone.

Knight and Kohen noted that outcrops of silcrete were observed to be “plentiful” along the eastern extension of Woodstock Avenue through which the Nurragingy Reserve is accessible.

During the last twenty years, Cumberland Plain predictive modelling has been developed and refined as new data becomes available. Beth White and Jo McDonald (2010) have contributed to the debate over site prediction by discussing the nature of Aboriginal site distribution, interpreted through lithic analysis of excavated sites in the Rouse Hill Development Area (White & McDonald 2010). The paper provides a spatial and distributive analysis of Aboriginal objects in relation to freshwater resources and along varying landform units. The findings of this study highlighted the relationship between proximity to freshwater and landscape with archaeological evidence of Aboriginal occupation.

The study also found that artefact densities were most likely to be greatest on terraces and lower slopes within 100 m of freshwater resources (White & McDonald 2010). The predictive model identified ridgelines and crests located between drainage lines were likely locations for containing archaeological evidence - though usually representative of background scatter similar to that identified for first and/or second order creek lines (White & McDonald 2010).

Archaeological assessments of Aboriginal sites in the Cumberland Plain have resulted in the refinement of the predictive model for the region.

Key findings of these studies include:

- Archaeological evidence of Aboriginal occupation is likely to be focussed on higher order watercourses, which is reflected in the predominance of PADs and artefacts surrounding these resources. Lesser order watercourses are less likely to contain evidence of prolonged or frequent Aboriginal occupation.
- Minimally disturbed lower slopes or ridgelines overlooking water courses are highly sensitive. These areas have the potential to contain evidence of more permanent or frequent occupation by Aboriginal people; these may be reflected by higher density artefact assemblages. Areas which are a significant walking distance from water or within a flood plain are not considered

to be desirable places for camping. Furthermore, flooding can also reduce the potential for intact archaeological material in these areas.

- Historical development is a major factor in reducing the potential for archaeological deposits. Historical development includes quarrying, the construction of dams, and the establishment of road networks.

The predictive modelling suggests that areas subject to flooding are less likely to retain evidence of past Aboriginal activity while areas with access to permanent water sources, minimally disturbed ground surface and lower slopes and ridge lines are highly sensitive.

The study area is in a highly disturbed area and located over 400m from the nearest water course.

7.0 SITE SURVEY METHODOLOGY

7.1 Aboriginal site definition

An Aboriginal site is generally defined as an Aboriginal object or place. An Aboriginal object refers to any deposit, object or material evidence (not being a handicraft) relating to Aboriginal habitation of the area that comprises New South Wales (DECCW 2010). Aboriginal objects may include stone tools, scarred trees or rock art. Some sites, or Aboriginal places, can also be intangible and although they might not be visible, these places have cultural significance to Aboriginal people.

The Code of Practice states, in regard to the definition of a site and its boundary, that one or more of the following criteria must be used when recording material traces of Aboriginal land use:

- The spatial extent of any visible Aboriginal objects, or direct evidence of their location
- Obvious physical boundaries where present, for example mound site and middens (if visibility is good), a ceremonial ground
- Identification by the Aboriginal community on the basis of cultural information

7.2 Archaeological survey methodology

7.2.1 Aims of archaeological survey

The aims of the archaeological survey were to:

- Inspect the perimeter of the site and car park, with focus on the latter as the central location for the proposed works
- Record any surface or potential subsurface Aboriginal sites that have not been recorded in AHIMS
- Identify areas of PAD that may be present in areas that have had no or minimal disturbance
- Engage with Deerubbin LALC regarding the proposed works and the archaeological potential of the study area
- Collect information to ascertain whether further archaeological investigation is required.

7.2.2 Site inspection

A site inspection was carried out on the 19 January 2022 by Emma Jones (Heritage Consultant, Artefact) and Elizabeth Bonshek (Senior Heritage Consultant, Artefact). While a representative of the Deerubbin LALC was to attend they were unable to do so on the day.

The study area is located on a slope which descends from north to south. Approximately 98% of the site has been built upon including an undercover car park (Figure 14, Figure 15 and Figure 16). Exposed areas of soil were located along the perimeter of the site and in landscaped garden areas.

On the north side of the driveway entrance located on Kellogg Road, a narrow passage way was covered in tufts of grass and weeds and moss, with visibility of 30 - 40% sufficient to reveal extensive scatters of gravel across the surface and stones (Figure 18). Large, square concrete storm water drains indicated the presence of subsurface works, as did fire security pipes and hydrant (Figure 17). On the south side of the entrance grass and weeds grew amongst stones, rubbish and debris. No

original soil profile was observed. Soils were disturbed and included fill. Soils had been pushed up to the wall of the building to form an embankment at the northern end of the easement (Figure 20).

No artefacts were found.

Figure 14. Back of the building and carpark at Kelloggs Road entrance

Figure 15. View to south from figure 14 (east side)

Figure 16. Undercover car park

Figure 17 Easement along western boundary, indicating presence of subsurface works.

Figure 18. Soil containing gravel.

Figure 19. Debris and rubbish on south side of easement.

An open area of some 965m^2 with several young trees is located in the southwest corner and abutting the boundary in that area. While there was leaf matter on the ground much or the ground was covered in Blue Metal gravel indicating the presence of imported materials and fill together with large patches of introduced sand (Figure 24): all indicating that the area has been modified. The small size of the trees suggests that those growing now are not those indicated in historical images for 1991 (Figure 8) or earlier. The area was assessed as disturbed, due to the presence of fill, and proximity to what would have been the construction activity associated with the covered carpark (Figure 16 and **Error! Reference source not found.**). Similar comments apply to the open area at the north east corner of the study area.

In summary, the ground was disturbed, and no artefacts were found.

Figure 20. Soil built up against building wall.

Figure 21. Open area in south west corner with young trees growing.

Figure 22. Area from camera to survey pole indicates extent of gravel on ground (detail in Figure 23).

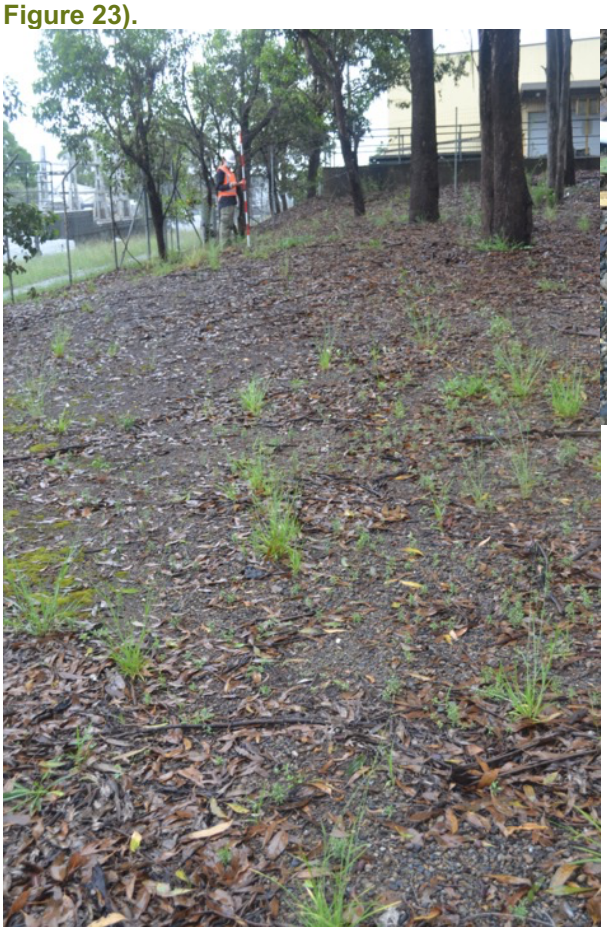

Figure 23. Blue metal gravel on surface.

Figure 24. Sand dumped on surface.

Figure 25. View from open section of south west corner to entry to under cover car park, showing young trees, descending drive way along car park wall.

Figure 26. Landscaped area at the rear of the car part (south end).

Figure 27. Landscaped are on Kellogg Road.

Figure 28. Lawn fronting Woodstock Road.

Figure 29. Remains of large tree in gardens on Woodstock Avenue.

Figure 30. Drainage works in lawn on Woodstock Avenue (below and figure 31)

Figure 31. Drainage works in lawn fronting Woodstock Avenue.

Figure 32. One of two transformers in landscaped area on Woodstock Avenue.

Figure 33. Footpath with grass borders on east side.

Figure 34. Disturbed soil in grass borders, including fill.

Landscaped areas were maintained on the southern boundary (Figure 26), adjacent to the car park; and on the north side fronting Woodstock Avenue (Figure 27 and Figure 28). The present of two tree stumps indicated that larger trees had been cut down (Figure 29). The area also housed drainage works (Figure 30 and Figure 31) as well as transformers or generators. A footpath with grass borders on either side (Figure 33 and Figure 33) was located on the easter border. The ground here included gravel and fill and was destroyed.

The ground in all these areas had been disturbed and modified. No artefacts were found in any part of the study area.

7.2.3 The aims of the archaeological survey were to:

- Inspect the ground surface of the site
- Record any surface or potential subsurface Aboriginal sites that have not been recorded in AHIMS
- Identify areas of PAD that may be present in areas that have had no or minimal disturbance
- Collect information to ascertain whether further archaeological investigation is required.

Results

Archaeological potential is closely related to levels of ground disturbance in the area. Other factors are also taken into account, such as whether artefacts were located on the surface, and whether the area is within a sensitive landform unit according to the predictive statements for the area.

In summary, the study area was assessed as having nil-low archaeological potential based on the following:

- there were no previously recorded sites in the study area
- the predictive model for the area suggests that artefacts might occur on upper slopes and ridgelines
- the predictive model for the area suggests that artefacts might occur within 100 meters of a creek. The study area is located more than 450m from the Eastern Creek.
- The study area was lies outside of area of archaeological sensitivity identified by Knight and Kohen 2001 (Figure 13)
- the study area was disturbed through the construction of a current facility and associated infrastructure including carparks and landscaping
- there was fill present across the study area indicating that the soil had been previously excavated or disturbed
- no artefacts were found in the study area.

The results of the site survey concluded that, due to the disturbed nature of the study area, it is unlikely that Aboriginal objects would be present as any intact landforms would have been impacted by previous landscape modification.

Therefore the study area is assessed as having nil to low potential and no further archaeological investigation is recommended.

7.3 Archaeological survey coverage

The study area was covered in one survey unit.

Table 6 presents a summary of the level of visibility and exposure at the site---- to determine the effective coverage of the study area and takes into consideration the effective coverage of the landform. Effective coverage was 100%. Ground surface visibility was 30%.

The Landform survey coverage is presented in (Table 7): effective coverage of the land form was 17% surveyed.

Table 6. Effective survey coverage

Survey unit	Landform	Survey unit area (sq. m)	Visibility (%)	Exposure (%)	Effective coverage area (sq. m)	Effective coverage (%)
1	slope	3409	30	40	3409	100

Table 7. Landform survey coverage

Landform	Landform area (sq. m)	Area effectively surveyed (sq. m)	% of landform effectively surveyed	Number of sites identified
slope	19700	3409	17	0

8.0 SIGNIFICANCE ASSESSMENT

8.1 Significance assessment methodology

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 to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH 2011) provides guidelines for heritage assessment with reference to the *Burra Charter* (Australia ICOMOS 2013). The assessment is made in relation to four values or criteria (Table 8). In relation to each of the criteria, the significance of the subject area should be ranked as high, moderate, or low.

Cultural heritage consists of places or objects, that are of significance to Aboriginal people. Cultural heritage values are the attributes of these places or objects that allow the assessment of levels of cultural significance.

Assessing the cultural significance of a place or object means defining why a place or object is culturally important. It is only when these reasons are defined that measures can be taken to appropriately manage possible impacts on this significance. Assessing cultural significance involves two main steps, identifying the range of values present across the study area and assessing why they are important.

Social/cultural heritage significance should be addressed by the Aboriginal people who have a connection to, or interest in, the site. As part of the consultation process the Aboriginal stakeholders were asked to provide information on the cultural significance of the study area. Information on consultation with Aboriginal stakeholders for the proposal will be provided in the Appendices.

Table 8. Burra Charter Heritage significance criteria

Criterion	Description
Social	The spiritual, traditional, historical or contemporary associations and attachments the place or area has for Aboriginal people. Social or cultural value is how people express their connection with a place and the meaning that place has for them. Does the subject area have strong or special association with the Aboriginal community for social, cultural or spiritual reasons?
Historic	Historic value refers to the associations of a place with a historically important person, event, phase or activity in an Aboriginal community. Is the subject area important to the cultural or natural history of the local area and/or region and/or state?
Scientific	This refers to the importance of a landscape, area, place or object because of its rarity, representativeness and the extent to which it may contribute to further understanding and information. Information about scientific values will be gathered through any archaeological investigation carried out. Does the subject area have potential to yield information that will contribute to an understanding of the cultural or natural history of the local area and/or region and/or state?
Aesthetic	This refers to the sensory, scenic, architectural and creative aspects of the place. It is often linked with the social values. It may consider form, scale, colour, texture and material of the fabric or landscape, and the smell and sounds associated with the place and its use. Is the subject area important in demonstrating aesthetic characteristics in the local area and/or region and/or state?

In addition to the four criteria, Heritage NSW (OEH 2011; 10) requires consideration of the following:

- 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?

8.2 Socio/cultural significance

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

To be completed from the feedback provided by the RAPS in response to the assessment methodology and the draft report.

8.3 Historic significance

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.

To be completed from the feedback provided by the RAPs in response to the assessment methodology and the draft report.

8.4 Scientific significance

Scientific values refer to a site's potential to contribute to our current understanding and information. As there are no archaeological values in the site, there is no scientific significance.

The scientific significance of the study areas was assessed as nil to low archaeological significance.

Table 9. Scientific significance assessment

Site Name (AHIMS ID)	Research potential	Representativeness	Rarity	Education potential	Overall significance assessment
none	Nil	Nil	Nil	Nil	Nil to Low

8.5 Aesthetic significance

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.

To be completed from the feedback provided by the RAPs in response to the assessment methodology and the draft report.

8.6 Statement of significance

To be completed from the feedback provided by the RAPs in response to the assessment methodology and the draft report.

9.0 AVOIDING AND MINIMISING HARM

9.1 Proposed works

The proposed works comprises the redevelopment of the site as summarised below:

- Demolition of existing structures.
- Construction and operation of a purpose built Materials Recycling Facility comprising a total of 7,572m² gross floor area, including:
  - Maximum building height of RL 57.83m.
  - Warehouse space: 6,732m²
  - Office space (across two levels) and amenities: 840m²
  - Capacity to process up to 120,000 TPA
- Car parking provided on-site: 40 car spaces
- Hard and soft landscaping
- Building identification signage

9.2 Impact assessment methodology

The definition of harm to an object or place under the NPW Act includes any act or omission that 'destroys, defaces or damages the object or place or in relation to an object –moves the object from land on which it had been situated.

Direct harm may occur as a result of activities which disturb the ground surface including site preparation activities, earthworks and ground excavation, and the installation of services and infrastructure.

Indirect harm for Aboriginal heritage refers to impacts that may affect sites or features located immediately beyond or within the area of the proposed works. Indirect harm may include impacts from vibration, increased visitation, or increased erosion, including ancillary project activities (construction and/or operation) that are not located within the study area.

9.3 Aboriginal heritage impact assessment

As there are no AHIMS sites recorded in the study area there is no impact on archaeological values.

Table 10. Summary of impacts

Site	Type of harm	Degree of harm	Consequence of harm
Study area	None	None	No loss of value

9.4 Ecologically Sustainable Development principles

In accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales*[1], the principles of ecologically sustainable development have been considered in preparation of this Aboriginal heritage assessment, including options to avoid impacts to Aboriginal cultural heritage, assessment of unavoidable impacts, identification of mitigation and management measures, and taking account of Aboriginal community views. The principles of ecologically sustainable development are detailed in the NSW *Protection of the Environment Administration Act 1991*. Principles of ecologically sustainable development relevant to the assessment of the proposal as it relates to Aboriginal cultural heritage are considered below.

9.4.1 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 its 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.

9.4.2 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').

Desktop analysis and the site survey has not revealed archaeological values at the site.

9.4.3 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.

Desktop analysis and site survey have concluded that there are nil to low archaeological values at the study area.

Cultural values at the study area are yet to be established.

9.5 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.

[1] Office of Environment and Heritage 2011

10.0 MANAGEMENT AND MITIGATION MEASURES

10.1 Ongoing consultation with registered Aboriginal parties

Consultation with the registered Aboriginal parties has commenced. Following the Unexpected finds policy below, consultation with Aboriginal parties will continue at completion of the ACHAR and also according to the results of the consultation process which is currently ongoing should this be needed.

10.2 Unexpected finds

An unexpected finds policy would be implemented in the event of any unexpected finds of Aboriginal sites, objects, or archaeological deposits being identified during construction.

An unexpected archaeological finds policy would involve the following actions:

- Stop work within the affected area, protect the potential archaeological find, and inform environment staff or supervisor
- Contact a suitably qualified archaeologist to assess the potential archaeological find
- If Aboriginal archaeological material is identified, works in the area should cease, and NSW Heritage should be informed. Further archaeological mitigation may be required prior to works recommencing
- If human remains are found:
  - Immediately cease all work at the particular location
  - Notify site manager and project archaeologist
  - Notify NSW Police
  - Notify Heritage NSW on the Environment Line 131555 as soon as practicable and provide details of the remains and their locations
  - Notify the Deerubbin LALC
  - Do not recommence any work at the location until cleared

11.0 CONCLUSIONS AND RECOMMENDATIONS

The following results and recommendations are based on consideration of:

- The requirements of Aboriginal heritage guidelines:
  - The ACHAR guide (OEH 2011)
  - The Code of Practice (DECCW 2010a)
  - Consultation Requirements (DECCW 2010b)
- SEARS (Department of Planning, Industry and Environment 2020)
- The likely impacts of the proposed development
- Consultation with RAPS has commenced and the RAPs will be sent the assessment methodology for their feedback in late January.

The assessment found that:

- No previously unrecorded Aboriginal sites or objects were identified within the study area during the site inspection.
- After physical examination of the study area and examination of historical aerial photography the study area has been assessed as having nil to low potential to retain intact archaeological deposits
- Consultation with RAPS established that there were….

Recommendations

Based on the results of this assessment and in accordance with Aboriginal heritage guidelines mandated in the SEARs for the proposal, the following recommendations are made:

- As the study area was found to be disturbed and to have a nil-low potential for Aboriginal objects to be located within it, it is recommended that further archaeological assessment is not required.
- The result of the consultation …… to be established
- If changes are made to the proposal that may result in impacts to areas not assessed by this ACHAR further assessment would be required.
- Unexpected Aboriginal objects remain protected by the *National Parks and Wildlife Act 1974*. If any such objects, or potential objects, are uncovered in the course of the activity, all work in the vicinity should cease immediately. A qualified archaeologist should be contacted to assess the find and Heritage NSW and Metropolitan LALC must be notified.
- If human remains, or suspected human remains, are found in the course of the activity, all work in the vicinity should cease, the site should be secured, and the NSW Police and Heritage NSW should be notified.

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13.0 APPENDIX

Removed for Public Viewing.

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