



Appendix N. Aboriginal Cultural Heritage Assessment (Landscape, 2021)

Buronga Landfill Expansion

Aboriginal Cultural Heritage Assessment



**Report to Wentworth Shire Council
18 September 2021**

Landscape

a division of ML Cupper Pty Ltd
ABN 48 107 932 918

PO Box 1068 Carlton 3053
e-mail: landscape@telstra.com
tel: 0408 006 690

Wentworth Shire Council

Buronga Landfill Expansion

Aboriginal Cultural Heritage Assessment

Local Government Area: Wentworth

Nearest Town: Buronga



Landscape

Natural and Cultural Heritage Management

a division of M.L. Cupper Pty Ltd

ABN: 48 107 932 918

Author: **Dr Matt Cupper**
Date: **18 September 2021**

PO Box 1068
Carlton 3053
e-mail: landskape@telstra.com
tel: 0408 006 690

EXECUTIVE SUMMARY

Wentworth Shire Council operates the Buronga Landfill, which is located at Lot 197 and 212 DP756946 and Lot 1 DP1037845 258 Arumpo Road, Buronga, approximately 25 km east of Wentworth and 5 km north of Buronga in western New South Wales (NSW) (Figure 1).

Wentworth Shire Council is planning to apply for an approval under Part 4 Division 4.7 (State Significant Development) of the *Environmental Planning and Assessment Act 1979* to expand the municipal landfill at Lot 197 and 212 DP756946 and Lot 1 DP1037845 258 Arumpo Road, Buronga. Works include excavation of new landfill cells, modified internal infrastructure and hardstands and stormwater and leachate drainage works.

Wentworth Shire Council commissioned Landskape to undertake an Aboriginal Cultural Heritage Assessment for the Buronga Landfill Expansion. This report presents an assessment of the potential Aboriginal cultural heritage related issues for the Buronga Landfill Expansion in accordance with the general requirements of the following guidelines and documents:

- *Aboriginal cultural heritage consultation requirements for proponents 2010 (Part 6 National Parks and Wildlife Act 1974)* (NSW Department of Environment, Climate Change and Water [DECCW], 2010a).
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010b).
- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (NSW Office of Environment and Heritage [OEH], 2011).
- The Australia International Council on Monuments and Sites (ICOMOS) *Burra Charter* (Australia ICOMOS, 2013).
- NSW National Parks and Wildlife Service *Aboriginal Cultural Heritage: Standards and Guidelines Kit* (NSW National Parks and Wildlife Service, 1997).
- *Ask First; A Guide to Respecting Indigenous Heritage Places and Values* (Australian Heritage Commission, 2002).

The specific objectives of the cultural heritage assessment were to:

- Consult the local Aboriginal community (consultation with the Aboriginal community followed *Aboriginal cultural heritage community consultation requirements for proponents* [DECCW, 2010a]), including in relation to cultural values of the Buronga Landfill Expansion area.
- Conduct a desktop assessment to delineate areas of known and predicted cultural heritage potential within the Buronga Landfill Expansion area.

- Undertake an archaeological survey of known and predicted Aboriginal cultural heritage potential areas identified in the desktop assessment, with representatives of the local Aboriginal community.
- Record any Aboriginal cultural heritage sites within the Buronga Landfill Expansion area and assess their significance.
- Identify the nature and extent of any potential impacts of the Buronga Landfill on Aboriginal cultural heritage.
- Devise options in consultation with the community to avoid or mitigate potential impacts of the development on Aboriginal cultural heritage sites and items.

One Aboriginal cultural heritage site has previously been recorded in the Buronga Landfill Expansion area. This is an isolated find of a stone artefact (AHIMS site number 46-3-0192). Wentworth Shire Council has previously obtained an Aboriginal Heritage Impact Permit to harm this object located within a proposed additional borrow pit. The present survey encountered three additional isolated finds of stone artefacts (Buronga Landfill Artefact 1-3; AHIMS site numbers 46-3-0203, 46-3-0204, 46-3-0205) at the Buronga Landfill Expansion area. These Aboriginal objects are outside proposed disturbance areas.

Based on the results of this cultural heritage investigation and consultation with representatives of the Registered Aboriginal Parties the following is recommended:

- Wentworth Shire Council avoid harm to the three isolated finds of stone artefacts (Buronga Landfill Artefact 1-3) near the proposed disturbance areas. This requires erection of permanent protective barriers around the Aboriginal objects.
- If any previously unidentified Aboriginal objects are encountered during construction of the proposal all works likely to affect the material must cease immediately and Heritage NSW and the RAPs consulted about an appropriate course of action prior to recommencement of work.
- In the unlikely event that human skeletal remains are encountered during construction the proposal, all work with the potential to impact the remains must cease. Remains must not be handled or otherwise disturbed except to prevent further disturbance. If the remains are thought to be less than 100 years old the Police or the State Coroner's Office (tel: 02 9552 4066) must be notified. If there is reason to suspect that the skeletal remains are more than 100 years old and Aboriginal, Wentworth Shire Council should contact the Environmental Line (tel: 131 555) for advice. In the unlikely event that an Aboriginal burial is encountered, strategies for its management would need to be developed with the involvement of the local Aboriginal community.
- Wentworth Shire Council should provide training to all on-site personnel regarding the Aboriginal cultural heritage management activities strategies relevant to their employment tasks.
- Wentworth Shire Council should continue to involve the registered Aboriginal parties and any other relevant Aboriginal community groups or members in matters pertaining to the proposal.

- Wentworth Shire Council should co-ordinate and implement these recommendations by integrating them into a single programme and document them in the form of a Heritage Management Plan (HMP). The HMP should remain active for the entire Project life and define the tasks, scope and conduct of all Aboriginal cultural heritage management activities.

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1 INTRODUCTION

1.1 THE PROPONENT

Wentworth Shire Council operates the Buronga Landfill at Lot 197 and 212 DP756946 and Lot 1 DP1037845 258 Arumpo Road, Buronga (Figure 1).

1.2 THE EXPANSION

The Buronga Landfill is located approximately 5 kilometres (km) north of Buronga and approximately 25 km east of Wentworth in western New South Wales (NSW) (Figure 1). Landfill operations commenced in 1934 and are currently contained in the south of the site with borrow pits for cell construction to the north in the proposed expansion area.

The proposed development is to expand the waste management services provided by Wentworth Shire Council at the Buronga Landfill. The development is proposed to include:

- upgrading the existing recycling infrastructure to provide a dedicated zero waste shed, community recycling station and bulking up areas to improve recycling rates and economics of recycling;
- constructing new landfill cells to the north of the existing landfill area, increasing the landfill footprint from 19 ha to approximately 40 ha. The expansion is proposed to be undertaken in eleven stages with each stage providing 3-5 landfill cells; and,
- increasing maximum waste volumes from 30,000 tonnes per annum to 100,000 tonnes per annum. Current waste acceptance from within WSC is nearing the limit of 30,000 tonnes per annum. It is also proposed to offer these services to the surrounding local government areas, such as Balranald, Central Darling and Murray River and potentially interstate.

This development is proposed to be staged and is anticipated to result in the life of the landfill site extending for over 100 years.

Approval for the Buronga Landfill Expansion is sought under Part 4 Division 4.7 (State Significant Development) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

1.3 AIM AND OBJECTIVES OF THE ASSESSMENT

The objective of this assessment is to provide Wentworth Shire Council with an Aboriginal Cultural Heritage Assessment (ACHA) to support an application for development approval for the Buronga Landfill Expansion.

This investigation involves a description of the context of the Buronga Landfill Expansion area and surrounds, identification of Aboriginal cultural heritage sites, items and values within the Buronga Landfill Expansion area, an assessment of the potential impacts to Aboriginal cultural heritage as a result of construction of the planned landfill cells and modified internal infrastructure and drainage works and development of recommendations to minimise, manage and mitigate any potential impacts.

This assessment has been undertaken in accordance with the relevant requirements of the various advisory documents and guidelines. These guidelines and documents include:

- *Aboriginal cultural heritage consultation requirements for proponents 2010 (Part 6 National Parks and Wildlife Act 1974) (Consultation Guidelines)* (NSW Department of Environment, Climate Change and Water [DECCW], 2010a).
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010b).
- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (NSW Office of Environment and Heritage [OEH], 2011).
- The Australia International Council on Monuments and Sites (ICOMOS) Burra Charter (Australia ICOMOS, 2013).

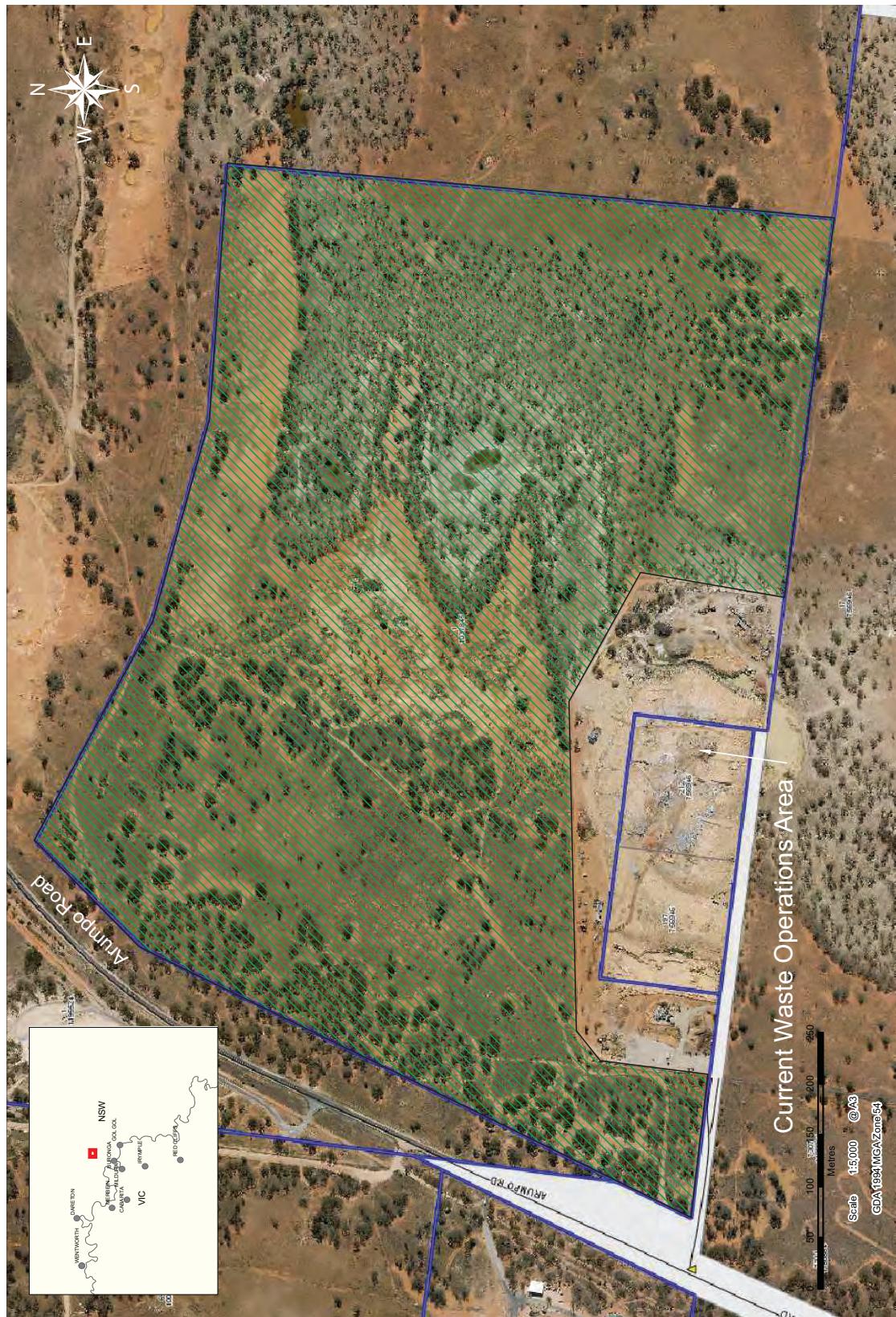
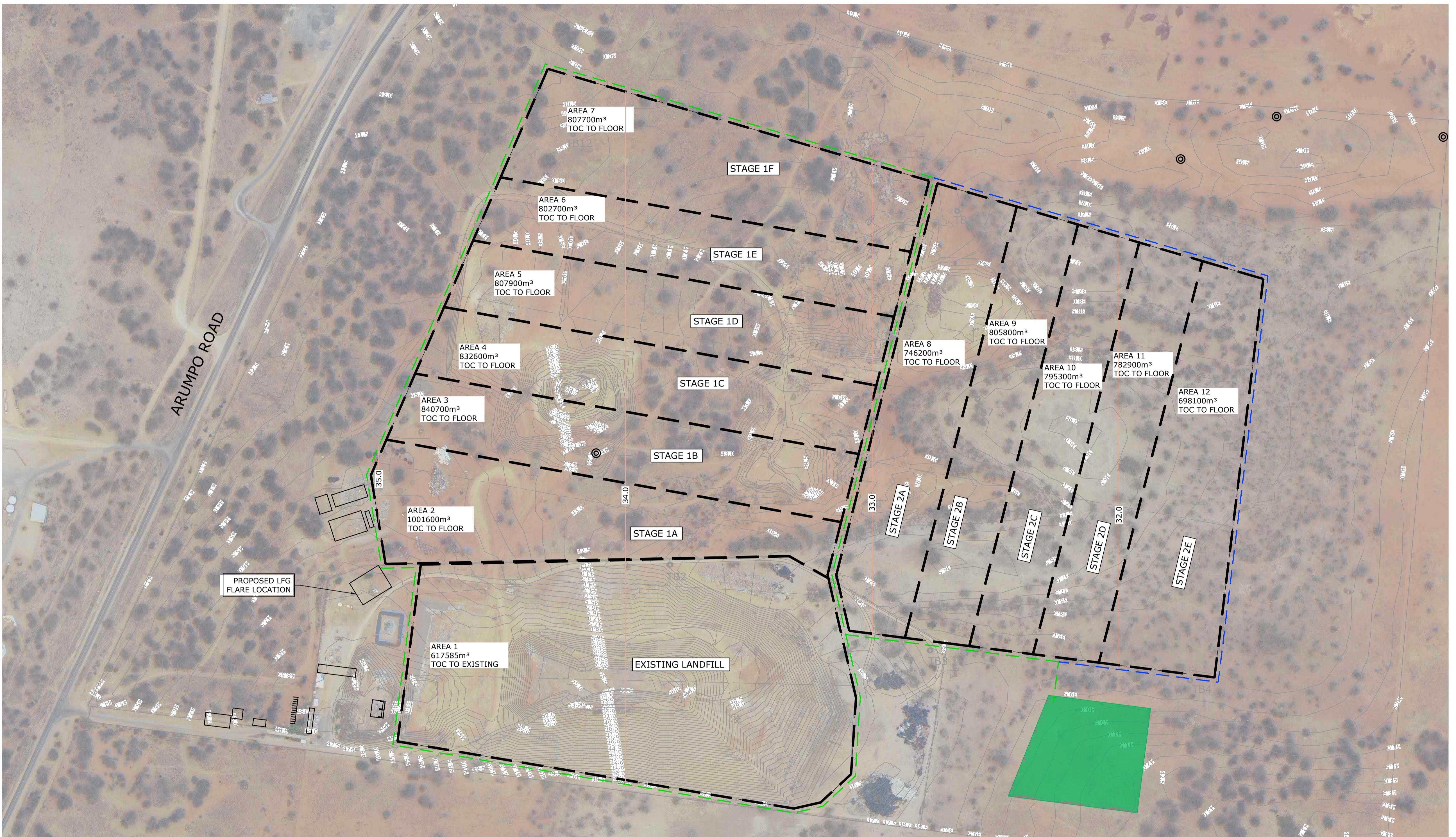


Figure 1. Location of the Buronga Landfill



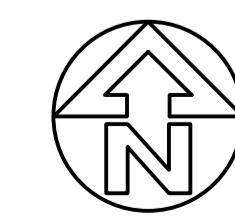
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BURONGA LANDFILL EXPANSION
FIGURE 2
PROPOSED CELL LAYOUT
FILENAME: 202597 CONCEPT DESIGN.DWG
PROJECT NUMBER 202597
DRAWING NUMBER 011
REVISION A

- *Aboriginal Cultural Heritage: Standards and Guidelines Kit* (NSW National Parks and Wildlife Service, 1997).
- *Ask First; A Guide to Respecting Indigenous Heritage Places and Values* (Australian Heritage Commission, 2002).

1.4 STRUCTURE OF THIS REPORT

This ACHA has been prepared in consideration of the requirements of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010b) and as such includes the following specific information:

- Section 1: Outlines the Buronga Landfill and the objectives and structure of this report.
- Section 2: Lists the investigators and contributors involved with this report.
- Section 3: Provides a summary description of the development proposal.
- Section 4: Details the consultation and partnership with Indigenous communities.
- Section 5: Outlines the landscape context and includes descriptions of land use history, geology and vegetation within the Buronga Landfill Expansion area.
- Section 6: Provides background information relevant to previous archaeological works including relevant ethno-history, the regional archaeological context and previous predictive models for the Buronga Landfill Expansion area.
- Section 7: Describes predictions for the Buronga Landfill Expansion area and documents the archaeological survey and data collection, and includes information regarding the method of the survey and a description of the areas surveyed.
- Section 8: Lists the results of the survey and provides a discussion and analysis of these results.
- Section 9: Assesses the cultural heritage significance of the Buronga Landfill Expansion area.
- Section 10: Assesses the impact of the Buronga Landfill Expansion on Aboriginal cultural heritage.
- Section 11: Lists the management, mitigation measures and recommendations.
- Section 12: Lists the references cited in this report.

A glossary of commonly used terms in the report is provided in Appendix 1.

2 INVESTIGATORS

Landscape was commissioned by Wentworth Shire Council in March 2021 to complete the ACHA for the Buronga Landfill Expansion and to prepare this report.

Dr Matt Cupper, a qualified archaeologist and geoscientist with 21 years' experience as a cultural heritage advisor, was Landscape's project archaeologist.

3 DESCRIPTION OF THE BURONGA LANDFILL EXPANSION

Wentworth Shire Council has conducted a review of waste planning for the remaining life of the Buronga Landfill to identify options to maximise waste storage capacity and to improve operational efficiency.

The review identified suitable land to the north and east of the existing/approved Buronga Landfill area. The additional landfill cells are required to allow for additional waste disposal as well as modifications and upgrades to access roads, hardstands, stormwater and leachate drainage and other supporting infrastructure.

The general proposed arrangement of the Buronga Landfill Expansion is presented on Figure 2.

4 ABORIGINAL COMMUNITY CONSULTATION

4.1 INTRODUCTION

In accordance with the Consultation Guidelines (DECCW, 2010a), this assessment has been prepared in consultation with the Aboriginal community (via the Registered Aboriginal Parties [RAPs]).

The following sections describe involvement by the RAPs and demonstrate that the input of the Aboriginal community has been considered when determining and assessing impacts, developing management measures, and making final recommendations relevant to Aboriginal cultural heritage within the Buronga Landfill Expansion area.

4.2 ABORIGINAL COMMUNITY PARTICIPATION

The RAPs were consulted throughout the preparation of this assessment, including:

- review and comment on the Proposed Methodology;
- during the field survey with the representatives of the RAPs;
- during the review period for the draft ACHA; and,
- encouraged to provide feedback and input throughout the assessment process.

The following sections outline the process and outcomes of the community consultation undertaken during preparation of the assessment to ascertain and manage the Aboriginal cultural heritage values of the Buronga Landfill Expansion area.

4.2.1 Identification of Registered Aboriginal Parties

In accordance with Section 4.1.2 of the Consultation Guidelines (DECCW, 2010a), notifications regarding the Buronga Landfill were sent on 3 May 2021 to the following organisations:

- Heritage NSW;
- Wentworth Shire Council;
- National Native Title Tribunal (NNTT);
- Native Title Services Corporation Limited (NTSCORP);
- Dareton Local Aboriginal Land Council (Dareton LALC);
- Western Local Land Services; and,
- Office of the Registrar, *Aboriginal Land Rights Act 1983*.

Responses to the Buronga Landfill notifications were received from the following organisations:

- Heritage NSW (4 May 2021);
- Dareton Local Aboriginal Land Council (4 May 2021);

- NTSCORP (6 May 2021); and,
- Wentworth Shire Council (7 May 2021).

A full record of all correspondence received from and sent to the Aboriginal community and the abovementioned organisations is presented in Appendices 2, 3 and 4.

In accordance with Sections 4.1 and 4.2 of the Consultation Guidelines (DECCW, 2010a), all individuals and organisations identified through the above correspondence were contacted in writing on 5 May 2021 and were invited to register an interest in the Buronga Landfill Expansion.

An advertisement inviting the registration of Aboriginal persons or groups who hold cultural knowledge relevant to, or who have a right or interest in, determining the cultural heritage significance of Aboriginal object(s) and/or place(s) in the Buronga Landfill Expansion area was published in the Sunraysia Daily newspaper on 5 May 2021 (Appendix 3).

Additionally, Aboriginal stakeholders with an interest in Aboriginal cultural heritage at the Buronga Landfill have been previously identified and Wentworth Shire Council has maintained ongoing consultation and engagement with these groups. These Aboriginal stakeholders included Barkandji Elder Mr Noel Johnson and Mr Rodney Lawson involved in the Buronga Landfill Project Due Diligence Assessment in 2016 (Watts, 2016) and Barkandji Native Title Group Aboriginal Corporation (represented by Mr Warwick Clark and Ms Tracey Kerwin) involved in the Buronga Landfill Upgrade Aboriginal Cultural Heritage Assessment in 2016 (Cupper, 2016)

The Barkandji Native Title Group Aboriginal Corporation, Dareton Local Aboriginal Land Council and Ta-Ru Board of Management/Mauraura Barkindji Traditional Owners nominated as RAPs for the Buronga Landfill Expansion.

A copy of the list of the RAPs for the Buronga Landfill Expansion was provided to Heritage NSW and Dareton LALC on 13 June 2021, in accordance with Section 4.1.6 of the Consultation Guidelines (DECCW, 2010a).

4.2.2 Presentation of Information about the Proposed Buronga Landfill Expansion

Information regarding the Buronga Landfill Expansion was provided in writing to the RAPs on 23 May 2021. The correspondence included an invitation to attend the field survey for the Buronga Landfill and a copy of the Proposed Methodology was provided for review and comment.

Input was sought in regards to the following aspects:

- The nature of the Proposed Methodology.
- Any Aboriginal objects or places of cultural value within the Buronga Landfill Expansion area, or issues of cultural significance.
- Any restrictions or protocols considered necessary in relation to any information of sensitivity that may be provided.
- Any other factors considered to be relevant to the heritage assessment.

The period for commenting on the Proposed Methodology was open between 23 May 2021 and 21 June 2021. No comments on the Proposed Methodology were received from the RAPs.

4.2.3 Aboriginal Community Involvement during the Field Assessment

All RAPs were invited to provide a representative for involvement in the field survey for the Buronga Landfill. The following RAPs participated in the survey:

- Dareton Local Aboriginal Land Council (represented by Mr Jason Smith); and,
- Ta-Ru Board of Management/Mauraura Barkindji Traditional Owners (represented by Mr Rex Smith Jnr).

The Aboriginal cultural heritage field survey was completed on 23 June 2021. Further details regarding the survey and survey coverage are provided in Section 7.

No comments on the Proposed Methodology were received so the survey was completed according to the strategy outlined in the Proposed Methodology and described in Section 7.

4.3 ABORIGINAL COMMUNITY INFORMATION ABOUT CULTURAL SIGNIFICANCE

As part of the review of the Proposed Methodology and during the field survey, the RAPs were asked to contribute their knowledge on the Buronga Landfill Expansion area and surrounds. This information contributed to the assessment of the cultural heritage significance of the Buronga Landfill Expansion area and is discussed further in Section 9.

4.4 REVIEW OF THE DRAFT ACHA

A draft of this report (i.e. the draft ACHA) was provided to all RAPs for their review and comment on 7 July 2021, in accordance with Sections 4.3 and 4.4 of the Consultation Guidelines (DECCW, 2010a). No comments were provided within the minimum 28 day response period closing 4 August 2021.

5 ENVIRONMENTAL CONTEXT

5.1 INTRODUCTION

The *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010b) requires a review of the environmental context to assist in the determination or prediction of the potential of a landscape to have accumulated or preserved Aboriginal cultural heritage items, the ways Aboriginal people may have used the landscape in the past, with regard to identifiable resources or focal points for activities, and the likely distribution of the material traces of Aboriginal land use based on these factors.

Detailing the landscape context is an integral procedure in modelling potential past Aboriginal land use practices and/or predicting site distribution patterns. The natural environment of an area influences the availability of local resources such as food and raw materials for artefacts, rock platforms for engravings and axe sharpening, and rock outcrops that may provide shelter. The landscape also provides the sediments that may bury objects and archaeological features, as well as the erosive processes that might expose or disperse them.

Geomorphic (land formative) processes may impact upon the type and frequency of archaeological remains. Past climate may also influence the location and types of resources available, which in turn shapes settlement and mobility patterns of past Aboriginal groups in the area. The location of different site-types (such as middens, stone artefact scatters, etc.) are strongly influenced by factors such as these along with a range of other associated features, which are specific to different land systems.

5.2 GEOLOGY

The Buronga Landfill Expansion area is located in the Lower Darling region of the Murray Basin. It lies within an area bounded to the west by the Lower Darling River and to the south by the Murray River. The surface geology of the region is mostly aeolian (wind-blown) sediments, while underlying sequences within the basin were deposited by shallow seas and lakes over the past 60 million years (Brown and Stephenson, 1991).

5.3 LANDFORMS AND VEGETATION

The Buronga Landfill Expansion area is located in sandplains, which are typical of the main landform in the region (Figures 3-6). These aeolian features comprise low, undulating regions of irregular sandy hummocks. Sandplains are vegetated by mosaics of Black and Pearl Bluebush (*Maireana pyramidata* — *Maireana sedifolia*) low-open shrublands or Belah (*Casuarina pauper*) — Rosewood (*Alectryon oleifolius*) — Wilga (*Geijera parvifolia*) low-open woodlands. Mallee (*Eucalyptus* spp.) tall shrublands also occur on the sandier hummocks. Lower-lying land to the east has been flooded from Gol Gol Lake and has supported populations of Black Box (*E. largiflorens*) woodland.

5.4 LAND-USE HISTORY

Overall, the environments of the Buronga Landfill Expansion area have been modified by past European land use practices to varying extents (Figures 3-6). The entire area has been used for sheep and cattle grazing following European settlement in the second half of the nineteenth century. Extensive earthworks have occurred in the southern, central and northern parts of the proposed borrow pit areas during past soil stripping and quarrying for previous sand extraction.



Figure 3. Central part of the Buronga Landfill Expansion area, previously quarried for sand.



Figure 4. Northern part of the Buronga Landfill Expansion area, previously quarried for sand.



Figure 5. Southern part of the Buronga Landfill Expansion area, previously quarried for sand.



Figure 6. Southern part of the Buronga Landfill Expansion area.

6 ABORIGINAL CULTURAL HERITAGE CONTEXT

Some of the earliest evidence of human occupation of Australia comes from southwestern NSW (Bowler *et al.*, 1970, 2003; Johnston and Clark, 1998; Thorne *et al.*, 1999; Pardoe, 2003; Cupper and Duncan, 2006; Olley *et al.*, 2006). Stone artefacts found at Lake Mungo, about 75 km to the northeast of the Buronga Landfill, have been dated to between 46,000 to 50,000 years ago (Bowler *et al.*, 2003). The burials of a male and female at Lake Mungo are 42,000 years old (Olley *et al.*, 2006, cf. Thorne *et al.*, 1999). People were also at nearby Lake Menindee from 45,000 years ago (Cupper and Duncan, 2006) and at Lake Victoria on the Murray River by around 21,000 years ago (Gill, 1973).

6.1 ETHNO-HISTORIC CONTEXT

Aboriginal people of the Barkindji, Kureinji, Latje Latje, Maraura, and Yerre Yerre language groups appear to have occupied the Murray River near its junction with the lower Darling River at the time of first contact with Europeans (Sturt, 1982 [1833]; 1984 [1844-6]; Mitchell, 1839; Eyre, 1985 [1842]; Krefft, 1865; Allen, 1974; Tindale, 1974; Hardy, 1976; Hercus, 1982, 1993). These tribes shared similar language and kinship systems, notably the division of members into matrilineal moieties (two-part social classification) (Tindale, 1974; Hercus, 1982, 1993; Blows, 1995).

At the time of European contact the Aboriginal people of the Murray-Darling Junction were hunter-fisher-gatherers and appear to have had a semi-sedentary lifestyle. Early accounts from the 1850s by the German naturalist Gerard Krefft (1865) suggest that these people lived along the Lower Darling and Murray Rivers during the warmest months of the year, with people moving away from the rivers into the dunefields to collect food after winter rains.

Aspects of the initial interaction between Europeans and Aboriginal people led to violent conflict. Aboriginal people were shot, poisoned and displaced from their land by pastoral settlers and, in retaliation, sheep and shepherds were speared. Within a decade of the first contact many of the Aboriginal people were living adjacent to pastoral homesteads, often working as shepherds or engaged in other labouring activities (Lans *et al.*, 1988; Withers, 1989). At the turn of the nineteenth century many Aboriginal people resided on both sides of the Murray River near Gol Gol.

6.2 PREHISTORIC CONTEXT

Accounts of Aboriginal land use of the Lower Darling during the late nineteenth and early twentieth centuries provide an insight into possible settlement patterns in the prehistoric period. Allen (1974), using these historical ethnographies and the archaeological record, invoked a subsistence model for the region based on the relationship between occupation of the riverine corridors and dunefields. Large populations of people congregated at the rivers during spring and summer and whenever the systems were high. Following seasonal rains smaller, mobile bands dispersed over the plains exploiting ephemeral resources (Allen, 1974).

The material record of this occupation is preserved in the archaeological sites of the Lower Darling region, most of which date to the period since the last Ice Age (after around 18,000 years ago) (Hope, 1981; Balme and Hope, 1990; Balme, 1995). All that remains at many of these sites are flakes of stone debris from the making and resharpening of stone tools. These were made both at Aboriginal open habitation areas (camp sites) or special activity areas such as stone knapping sites. As well as being the sites of manufacture and maintenance of stone implements, open habitation areas usually contain evidence of domestic and other activities such as cooking and food preparation. Campfires or oven hearths are common, marked by calcrete, baked clay, ferricrete, sandstone and silcrete heat retaining stones or hearthstones and charcoal. Organic remains consist of burnt animal bones, Emu and aquatic bird eggshell and freshwater mussel shell.

6.3 TYPES OF ABORIGINAL CULTURAL HERITAGE SITES IN THE REGION

Based on the results and analytical conclusions of previous archaeological surveys in similar landscape contexts in the Lower Darling region it is possible to predict the types and topographic contexts of Aboriginal cultural heritage sites in the Buronga Landfill Expansion area. The occurrence and survival of archaeological sites is, however, dependent on many factors including micro-topography and the degree of land surface disturbance.

The types of Aboriginal cultural heritage site previously recorded in the Lower Darling region are described in Sections 6.3.1-6.3.8.

6.3.1 Stone Artefact Scatters

Scatters of stone artefacts exposed at the ground surface are one of the most commonly occurring types of Aboriginal cultural heritage site in the region (Hope, 1982). The remains of fire hearths may also be associated with the artefacts. In rare instances, sites that were used over a long period of time may accumulate sediments and become stratified. That is, there may be several layers of occupation buried one on top of another.

Stone artefact scatters are almost invariably located near permanent or semi-permanent water sources. Local topography is also important in that open campsites tend to occur on level, well-drained ground elevated above the local water source. In the Lower Darling region they are commonly located on river terraces and along creek-lines and also around the margins of lakes, swamps and claypans.

6.3.2 Hearths

Hearths consist of lumps of burnt clay or stone cobble hearthstones. Sometimes ash and charcoal are preserved. Other materials found in hearths include animal bone, freshwater mussel shell, Emu eggshell and stone artefacts. Hearths probably represent the remains of cooking ovens, similar to those described in ethnographic accounts by Major Thomas Mitchell (1839) and Peter Beveridge (1869) (see also Coutts *et al.*, 1979). These were lined with baked clay nodules and stone cobbles, possibly to retain heat. Hearths may be isolated or occur in clusters and may be associated with open campsites or middens. They are often located in dune swales, particularly on claypans, near soaks and on floodplain terraces.

6.3.3 Freshwater Shell Middens

Shell middens are deposits of shell and other food remains accumulated by Aboriginal people as food refuse. In inland NSW these middens typically comprise shells of the freshwater lacustrine mussel *Velesunio ambiguus* or the freshwater riverine mussel *Alathyria jacksoni*. Freshwater middens are most frequently found as thin layers or small patches of shell and often contain stone or bone artefacts and evidence of cooking. Such sites are relatively common along the Darling River and its associated lakes and tributaries.

6.3.4 Earth Mounds

Earth mounds may have been used by Aboriginal people as cooking ovens or as campsites. They are common on the plains of southwestern NSW. Originally they appear to have ranged from 3 to 35 metres in diameter and from 0.5 to 2 metres in height. Today, however, they may be difficult to recognize because of the effects of ploughing, grazing and burrowing rabbits. Earth oven material, stone artefacts, food refuse and the remains of hut foundations have been exposed in excavated earth mounds.

6.3.5 Quarry Sites

Quarries are locations where Aboriginal people obtained raw material for their stone tools or ochre for their art and decoration. Materials commonly used for making flaked stone tools include chert, silcrete, quartz and quartzite. In the Lower Darling region stone sources are particularly scarce. Silcrete outcrops occur at a number of locations in southwestern NSW and chert is found exposed in cliffs incised by the Murray River in South Australia. Most other stone in the Lower Darling region was probably sourced via long-distance trade links with the Barrier Ranges and the southeastern Australian Highlands.

6.3.6 Modified Trees

Slabs of bark were cut from trees by Aboriginal people and used for a variety of purposes including roofing shelters and constructing canoes, shields and containers. Scars also resulted from the cutting of toeholds for climbing trees to obtain honey or to capture animals such as possums. In the Lower Darling region River Red Gums and Black Box are the most commonly scarred species. The classification of scarred trees as natural, European or Aboriginal is often problematic. However, if the scar is Aboriginal the tree must now be more than ~150 years old.

6.3.7 Stone Arrangements, Ceremonial Rings and Ceremony and Dreaming Sites

Stone arrangements range from cairns or piles of rock to more elaborate arrangements such as stone circles or standing slabs of rock held upright by stones around the base. Some stone arrangements were used in ceremonial activities whilst others may represent sacred or totemic sites. Other features associated with the spiritual aspects of Aboriginal life are those now called 'ceremony and dreaming' sites. These can be either stone arrangements or natural features such as rock outcrops, which may be associated with initiation ceremonies or the activities of ancestral creators.

6.3.8 Burials

Aboriginal burial grounds may consist of a single interment or a suite of burials. Burials tend to be in areas of sandy soil that were easy to dig and above floodwaters. Burials are frequently located in source-bordering sand dunes, sand ridges, lunettes and levees along watercourses (Bonhomme, 1990; Hope, 1993). Knowledge of Aboriginal burial grounds is best sought from local Aboriginal communities.

6.4 PREVIOUSLY RECORDED ABORIGINAL CULTURAL HERITAGE SITES IN THE BURONGA LANDFILL EXPANSION AREA

There is one previously recorded Aboriginal cultural heritage site recorded within the Buronga Landfill Expansion area registered on the NSW OEH Aboriginal Heritage Information Management System (AHIMS) database (AHIMS search 603490, 4 July 2021).

Watts (2016) identified an isolated find of a broken sandstone core (AHIMS site number 46-3-0192) during a Due Diligence Assessment of the Buronga Landfill Expansion area. This is located in a borrow pit work area, immediately north of the existing Buronga Landfill operations area. This Aboriginal object could not be reidentified by Cupper (2016). Wentworth Shire Council subsequently obtained an Aboriginal Heritage Impact Permit (AHIP Number 4081) (an AHIP issued under the NSW *National Parks and Wildlife Act, 1974*) to harm the site and the area was disturbed by construction of a borrow pit.

Gilding (2006) recorded two isolated finds of silcrete artefacts in the sandplain hinterland between at a loam pit immediately northeast of the Buronga Landfill (AHIMS site numbers 46-3-0092 and 46-3-0093). These sites are approximately 500 m northeast of the Buronga Landfill Expansion area. The isolated artefacts were collected by Gilding under AHIP Number 2495 issued to salvage Aboriginal objects.

A copy of the AHIMS search results is provided in Appendix 5.

7 CULTURAL HERITAGE FIELD INVESTIGATION

In accordance with the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in New South Wales* (OEH, 2011) and *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW, 2010b), an archaeological design and survey methodology was prepared as a key component of the cultural heritage field assessment. Details of the archaeological design and survey methodology are presented in the following sections.

7.1 OVERVIEW OF PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

An understanding of the Aboriginal archaeology of southwestern NSW has begun to emerge from a number of studies including some undertaken in the Buronga area. A study by Craib (1992) is among the most comprehensive and provides a summary of the regional archaeological record. Craib (1992) documented the distribution of Aboriginal archaeological sites around the margins of Gol Gol Lake to the immediate east of the Buronga Landfill Expansion area and made predictions about site distribution based on observations of the landforms of the region. Other studies at Gol Gol Lake include an investigation of possible culturally modified trees on the western shore by Thomas (1964), recording of Aboriginal archaeological sites on the southeastern lake margin by McIntyre (1981) and an assessment of work areas for groundwater drawdown by Cupper (2009a, 2009b). Craib (1992) also inspected the eastern shoreline and parts of the western shoreline of Mourquong Swamp to the immediate west of the Buronga Landfill Expansion area and Gilding (2006) archaeologically surveyed an area on the southwestern margin of Mourquong Swamp.

Thomas (1964) made descriptions of 93 river red gum and black box trees bearing scars at Gol Gol Lake (AHIMS site number 46-3-0006). Thomas (1964) speculated that few if any of the scars involved the removal of bark for utilitarian purposes such as dishes or covers for shelters. Instead he suggested the site had some ceremonial purpose, although there is no ethnographic evidence to support this theory (Thomas 1964).

McIntyre (1981) inspected the corridor of a high voltage electricity transmission line, locating three midden sites on the southeastern lunette of Gol Gol Lake. They consisted of small concentrations of shell restricted to thin, single horizons scattered over areas of less than 3 m diameter.

Craib's (1992) investigation involved a ground surface survey of the perimeter of Gol Gol Lake. He recorded 19 Aboriginal archaeological sites, many of which were complexes comprising shell middens, stone artefacts and hearths.

Six of the site complexes recorded by Craib (1992) contained midden shell, stone artefacts and hearths. Midden material at most of these sites also had non-human animal bone preserved. The 93 possible modified trees recorded by Thomas (1964) occurred at one of these sites and another had five modified trees. One of the site complexes also had a single human burial. There were two human burial sites that contained small amounts of shell, five sites with only shell, four sites with stone artefacts and hearths (one of which also had a single human burial), one shell midden and stone artefact site complex with two modified trees and a single modified tree.

Craib (1992) noted that midden shell extended along the entire western shore of Gol Gol Lake. Mainly silcrete stone artefacts became more abundant towards the southwestern end. Aboriginal archaeological sites were smaller on the eastern lunette, consisting of small numbers of ground and flaked stone, scattered baked clay heat retainers from hearths and discrete lenses of freshwater mussel shell (Craib 1992). The four human burials, all single interments, occurred in these eastern areas. Modified trees occurred on the lakeshore.

Cupper (2009a, b) re-identified some of the cultural heritage sites previously recorded at Gol Gol Lake and his archaeological survey of groundwater extraction infrastructure encountered an additional three shell midden sites at the lake.

Much less abundant cultural heritage has been identified at Mourquong Swamp to the west of the Buronga Landfill Expansion area, or in the area between Mourquong Swamp and Gol Gol Lake, including the present study area. Craib (1992) encountered two isolated stone artefacts on the eastern lunette of Mourquong Swamp: a silcrete core measuring approximately 20 x 20 x 20 mm and a quartz flake less than 10 mm in length. He also noted five fragments of mussel shell on an exposure between the playa and Gol Gol Lake (Craib 1992). A possible culturally modified Black Box tree also occurred in this hinterland area (Craib 1992).

Gilding (2006) located an isolated stone artefact (AHIMS site number 46-3-0095), a brown chert distal flake, on the southwestern margin of Mourquong Swamp. He also recorded two isolated finds of silcrete artefacts in the sandplain hinterland between Mourquong Swamp and Gol Gol Lake (AHIMS site numbers 46-3-0092 and 46-3-0093).

Watts (2016) completed a Due Diligence Assessment of the Buronga Landfill Expansion area. She identified an isolated find of a broken sandstone core (AHIMS site number 46-3-0192) in the southern part of the proposed borrow pit work area, immediately north of the existing Buronga Landfill borrow pit.

Cupper (2016) archaeologically surveyed the Buronga Landfill Expansion area during an Aboriginal cultural heritage assessment. No Aboriginal objects were identified during the assessment, which Cupper (2016) attributed to the extensive surface disturbance access the area.

7.2 CULTURAL HERITAGE SITE PREDICTIVE MODEL

Previous archaeological studies indicate that dunefields and sandplains of the Lower Darling have a low density of Aboriginal cultural heritage sites. Occupation sites are almost invariably located at small ephemeral water sources such as swamps and claypans (McIntyre, 1981; Clark, 1983). The most frequently recorded Aboriginal sites in the dunefields and sandplains are stone artefact scatters and hearths (AHIMS site database). Isolated finds of stone artefacts and hearthstones are also represented in the archaeological record. Other Aboriginal cultural heritage site types previously identified in the Lower Darling region are shell middens, stone quarries, ceremonial and dreaming sites, trees scarred by Aboriginal people, burials, earth mounds and stone arrangements (AHIMS site database).

Based on these observations of archaeological site types and their distribution and landscape setting, the following predictive model of site types and locations within the Buronga Landfill Expansion area was developed prior to the survey:

- **Stone artefact scatters, hearth and mound sites and isolated finds of stone artefacts or hearthstones** have the potential to occur within the Buronga Landfill Expansion area. The density of these types of sites was predicted to be low, given the absence of nearby permanent sources of water. Open occupation sites are typically found within 500 metres of water sources, so such sites are most likely to be encountered on level ground adjacent in dune swales that may intermittently retain surface water following rain.
- **Stone quarry** sites are unlikely to occur in the Buronga Landfill Expansion area, as there are no rock outcrops suitable for knapping.
- **Scars made by Aboriginal people** may occur on the Black Box trees that grow in the Buronga Landfill Expansion area.
- The chance of encountering **shell middens** was predicted to be low, as they are usually found near permanent water sources, as are **burial** sites. Source-bordering dunes adjacent to waterways are the landforms most likely to contain human skeletal remains.
- Although **stone arrangements** have been recorded in the Lower Darling region, they are not common and were considered unlikely to be encountered in the Buronga Landfill Expansion area. Stone arrangements tend to occur on level ground, often on elevated landforms.

While predictive studies such as this can be expected to identify areas in which sites associated with economic or subsistence activities may be present, notably open habitation areas, other sites may fall outside such a predictive framework.

For example, places associated with spiritual aspects of traditional Aboriginal society such as ceremony and dreaming sites are often located at topographically distinct or unique features, which cannot be identified from an examination of maps or other records. For this reason, it was essential that local Aboriginal communities be consulted so that sites of significance to them can be identified.

7.3 FIELD METHODOLOGY

The archaeological field survey was based on the sampling strategy developed in accordance with the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH, 2011) and Requirement 5a of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010b) and outlined in Section 7.3.2.

The objective of the field survey was to identify sites of Aboriginal cultural significance within the Buronga Landfill.

7.3.1 Personnel

The survey was conducted over a period of one day on 23 June 2021. The participants of the field surveys were project archaeologist Dr Matt Cupper of Landskape, together with the representatives from the RAPs listed in Section 4.2.3 (Figures 7 and 8).



Figure 7. Survey Team Members Inspecting the Buronga Landfill Expansion area.



Figure 8. Survey Team Members Inspecting the Buronga Landfill Expansion area.

7.3.2 Survey Methods

The Buronga Landfill Expansion area was inspected on foot by the project archaeologist and Aboriginal community representatives. The field team examined the ground surface for any archaeological traces such as stone artefacts, hearths, hearthstones, shells, bones and mounds. All mature trees in the areas of proposed disturbance were inspected for scarring or carving by Aboriginal people.

Particular attention was paid to areas with high ground surface visibility such as along stock and vehicle tracks and in scalds, gullies and other eroded areas.

The team members walked abreast across the surveyed areas in a series of closely spaced transects. These were evenly distributed over the areas of proposed disturbance and approximately 10 metres apart. Due to the general openness of the landscape it was usually possible to identify likely site locations from at least 10 metres and deviate from the transects to make closer inspections.

Survey units and descriptions of the visibility conditions for each survey unit are provided in Table 1.

Table 1. Visibility Conditions in the Buronga Landfill Expansion area.

Survey Unit	Landforms	Vegetation	Visibility	Exposures	Exposure	Survey Method
1	Sandplain	Mallee Eucalypt tall shrubland, Bluebush low shrubland	80 %	Quarrying, animal tracks, vehicle tracks, gullies, scalds	80 %	Pedestrian
2	Swale	Black Box woodland, Bluebush low shrubland	70 %	Animal tracks, vehicle tracks, gullies, scalds	70 %	Pedestrian
3	Sandplain	Mallee Eucalypt tall shrubland, Bluebush low shrubland	80 %	Quarrying, animal tracks, vehicle tracks, gullies, scalds	80 %	Pedestrian

% - percentage.

7.4 SURVEY COVERAGE DATA

7.4.1 Conditions of Visibility

Conditions of ground surface visibility affect how many sites are located. Visibility may also skew the results of a survey. If, for example, conditions of ground surface visibility vary dramatically between different environments, then this would be reflected in the numbers of sites reported for each area. The area with the best visibility may be reported as having the most sites (because they are visible on the ground) while another area with less visibility but perhaps more sites would be reported as having very little occupation. It is important therefore to consider the nature of ground surface visibility as part of any archaeological investigation.

Survey units and descriptions of the visibility conditions for each survey unit are provided in Table 1 and mapped in Figure 9.

Conditions of ground surface visibility were typically around 70-80 % (Table 1). Grass and herbaceous plant growth was very low and the ground surface was exposed by erosion through quarrying, scalding and gullying and stock and vehicular traffic (Figures 10-13).



Figure 9. Survey units at the Buronga Landfill Expansion Area



Figure 10. Example of Surface Exposure in the Buronga Landfill Expansion area.



Figure 11. Example of Surface Exposure in the Buronga Landfill Expansion area.



Figure 12. Example of Surface Exposure in the Buronga Landfill Expansion area.



Figure 13. Example of Surface Exposure in the Buronga Landfill Expansion area.

7.4.2 Coverage Analysis

Coverage analysis is a useful measurement to allow cultural resource managers to assess surveys from adjacent areas and it also allows some meaningful calculation of the actual sample size surveyed. The *actual* or *effective* area surveyed by a study depends on the conditions of ground surface visibility. Conditions of surface visibility are affected by vegetation cover, geomorphic processes such as sedimentation and erosion rates and the abundance of natural rock that may obscure the remains of cultural activities.

All of the Buronga Landfill Expansion area was inspected on foot. The areas covered during the survey are outlined in Table 2 and Figure 9 and summarised by landform in Table 3. Survey coverage was high, given the intensive nature of the survey and the generally excellent conditions of visibility.

Table 2. Survey Coverage of the Buronga Landfill Expansion area.

Survey Unit	Landform	Survey Unit Area (ha)	Visibility (%)	Exposure (%)	Effective Cover (ha)	Effective Cover (%)	Sites
1	Sandplain	64.9	80	80	20.8	32	4
2	Swale	23.5	70	70	6.6	28	-
3	Sandplain	30.0	80	80	9.6	32	-
Total		118.4			37.0	31	4

ha – hectares.

Table 3. Landform Summary of Sampled Areas of the Buronga Landfill Expansion area.

Landform	Landform Area (ha)	Area Effectively Covered (ha)	Landform Effectively Surveyed (%)	Sites
Sandplain	94.9	30.4	32	4
Swale	23.5	6.6	28	-

ha – hectares.

8 RESULTS AND DISCUSSION

8.1 PREVIOUSLY IDENTIFIED ABORIGINAL CULTURAL HERITAGE

There is one previously recorded Aboriginal object in the proposed works area for the Buronga Landfill Expansion (Table 4; Figure 14). This is AHIMS site number 46-3-0192 (Buronga Landfill Artefact Scatter 1), an isolated find of a broken sandstone core, which had been identified during the Buronga Landfill Project Due Diligence Assessment in 2016 (Watts, 2016) (Figure 15). This Aboriginal object was identified immediately north of the existing Buronga Landfill borrow pit. The Aboriginal object could not be re-identified during the survey of Copper (2016).

Wentworth Shire Council has previously obtained an Aboriginal Heritage Impact Permit (AHIP Number 4081) (an AHIP issued under the NSW *National Parks and Wildlife Act, 1974*) to harm the site and the area was disturbed by construction of a borrow pit.

A summary description of this feature is contained in Table 4 and mapped in Figure 14.

Table 4. Summary data of Aboriginal cultural heritage place in the proposed work areas.

AHIMS Site Number	Site Name	GDA94 Zone 54 (mE)	GDA94 Zone 54 (mN)	Site size (m)	Landform	Contents
46-3-0192	Buronga Landfill Artefact Scatter 1	610565	6223164	na	Sandplain	Broken sandstone core

8.2 NEWLY IDENTIFIED ABORIGINAL CULTURAL HERITAGE

Three Aboriginal cultural heritage sites were newly identified in the Buronga Landfill Expansion area. These are all isolated finds of stone artefacts and comprise:

Buronga Landfill Artefact 1 (AHIMS site number 46-3-0203) – a silcrete flake on a sandplain in the northeast of the Buronga Landfill Expansion area (Figure 16).

Buronga Landfill Artefact 2 (AHIMS site number 46-3-0204) – a broken sandstone muller (grindstone) on a sandplain in the northeast of the Buronga Landfill Expansion area (Figure 17).

Buronga Landfill Artefact 3 (AHIMS site number 46-3-0205) – a silcrete angular fragment on a sandplain in the northeast of the Buronga Landfill Expansion area (Figure 18).

Summary descriptions of these features are contained in Table 5 and a map of their locations is depicted in Figure 14.



Figure 14. Aboriginal cultural heritage (isolated finds of stone artefacts) at the Buronga Landfill

Table 5. Summary data of Aboriginal cultural heritage places near the proposed work areas.

AHIMS Site Number	Site Name	GDA94 Zone 54 (mE)	GDA94 Zone 54 (mN)	Site size (m)	Landform	Contents
46-3-0203	Buronga Landfill Artefact 1	611253	6223510	na	Sandplain	Silcrete flake
46-3-0204	Buronga Landfill Artefact 2	611366	6223560	na	Sandplain	Broken sandstone muller
46-3-0205	Buronga Landfill Artefact 3	611562	6223536	na	Sandplain	Silcrete angular fragment

No additional Aboriginal cultural heritage sites beyond those described above were identified across the remainder of the Buronga Landfill Expansion area, despite the intensive nature of the survey. This negative result is despite the excellent conditions of surface visibility and high survey coverage. It is attributable to both the landscape setting of the Buronga Landfill Expansion area, which is not near permanent water and therefore unlikely to contain abundant Aboriginal cultural heritage sites, and previous disturbance of this area by sand quarrying, which may have destroyed Aboriginal cultural heritage sites, had they occurred in this area in the past.

Modified trees were not identified despite inspection of all mature trees in the Buronga Landfill Expansion area. Quarry sites are also definitely not represented in the Buronga Landfill Expansion area as rock outcrop is lacking. Landforms such as lunettes or source-bordering sand dunes that might contain sensitive sub-surface archaeological material such as burials do not occur in the Buronga Landfill Expansion area. The sediments of the Buronga Landfill Expansion area had been well enough exposed by past sand quarrying, pastoral activities, vehicular traffic and wind and water erosion to determine that no additional archaeological material was present on the surface nor is likely to be buried beneath the soil.

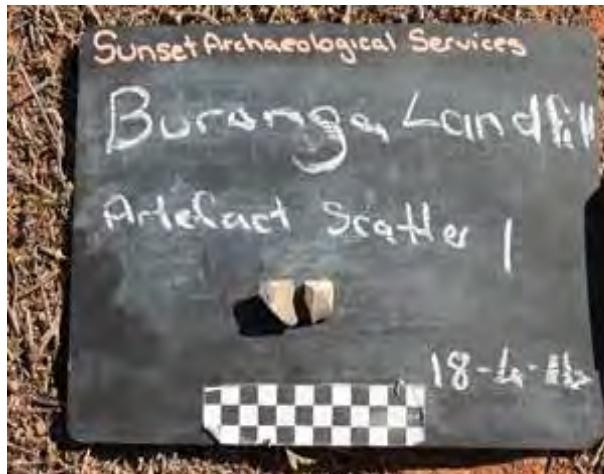


Figure 15. Buronga Landfill Artefact Scatter 1 (AHIMS site number 46-3-0192).



Figure 16. Buronga Landfill Artefact 1 silcrete flake (AHIMS site number 46-3-0203).



Figure 17. Buronga Landfill Artefact 2 broken sandstone muller/grindstone (AHIMS site number 46-3-0204).



Figure 18. Buronga Landfill Artefact 3 silcrete angular fragment (AHIMS site number 46-3-0205).

9 ABORIGINAL CULTURAL HERITAGE VALUES

9.1 BACKGROUND

All Aboriginal objects are afforded protection under the NP&W Act, but decisions about appropriate management of individual cultural heritage items or sites are usually based on their assessed significance (archaeological and cultural) as well as the likely impact of the proposed development and the benefits of the development. The *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH, 2011) and *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW, 2010b) requires significance assessment in accordance with the processes set out in the Burra Charter (Australia ICOMOS, 1988, 1999, 2013).

The process of significance assessment has received considerable attention since the early 1980s and criteria for assessing these values have been developed and adapted to deal specifically with Aboriginal cultural heritage. The significance of Aboriginal archaeological sites such as those found during this study are usually assessed in terms of their importance to archaeologists (i.e. their scientific or research significance), their importance to contemporary Aboriginal people and their importance to the general public. Once the significance of a site has been assessed, it can be ranked against others and specific recommendations formulated. Criteria for assessing scientific significance are set out below.

Under the Burra Charter (Australia ICOMOS, 1988, 1999, 2013), cultural significance means aesthetic, historic, scientific, or social value for past, present or future generations. Cultural significance is a concept that helps in estimating the value of places. The places that are likely to be of significance are those that help an understanding of the past, enrich the present, and may be of value to future generations. Cultural significance is embodied in the place itself, its “*fabric, setting, use, associations, meanings, records, related places and related objects*” (Australia ICOMOS 1999). The components of significance - aesthetic, historic, scientific, social and spiritual - are described below.

Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, colour, texture and material of the fabric, the smells and sounds associated with the place and its use (Australia ICOMOS 1988).

A place may have historic value because it has influenced, or has been influenced by, a historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place, the significance will be greater where evidence of the association or event survives in-situ, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment (Australia ICOMOS 1988).

The scientific or research value of a place will depend on the importance of the data involved, on its rarity, quality (integrity) or representativeness, and on the degree to which the place may contribute further substantial information (Australia ICOMOS 1988). Scientific or archaeological

significance may be assessed by placing a site, feature or landscape in a broader regional context and by assessing its individual merits in the context of current archaeological discourse.

Social value is broadly defined as *the qualities for which a place has become a focus of spiritual, political, natural or other cultural sentimental to a majority or minority group* (Australia ICOMOS 1988: 30). Johnston (1994) explains “*Social value is about collective attachment to places that embody meaning important to a community, these places are usually community owned or publicly accessible or in some other way “appropriated” into people’s daily lives. Such meanings are in addition to other values, such as the evidence of valued aspects of history or beauty, and these meanings may not be apparent in the fabric of the place, and may not be apparent to the disinterested observer*” (Johnston 1994: 10).

Although encompassed within the criterion of social value, the spiritual value of a place was added to The Burra Charter in 1999 (Australia ICOMOS 1999: 1). Spiritual value is predominantly used to assess places of cultural significance to Aboriginal Australians.

9.2 ASSESSMENT OF ABORIGINAL CULTURAL HERITAGE SIGNIFICANCE

Aboriginal cultural heritage significance indicates the importance of a site or feature to Aboriginal communities. This category may include sites, items and landscapes that people may have traditional ties with, as well as areas that may have contemporary importance to Aboriginal communities. The perceptions of Aboriginal people on the significance of archaeological sites usually stem from traditional, cultural and educational beliefs although most local Aboriginal communities also value the scientific information that archaeological sites may be able to provide.

Places of cultural value may have social significance to Aboriginal communities, they may have historic value through association with historic themes (e.g. missions or massacres), or they may take on value because of their rarity or because a place may be able to contribute new information about the past. Places may have aesthetic significance, being natural features with symbolic values, dramatic presence or tranquil qualities. Such Aboriginal cultural significance may not be in accord with the interpretations made by archaeologists – a site may have low archaeological significance but high Aboriginal significance, or vice versa (Australia ICOMOS 1988).

Archaeological sites provide connections to the past for the present Aboriginal community and for future generations. Aboriginal cultural heritage sites such as those identified during this survey can also provide information about past lifestyles and strengthen the links between Aboriginal people and the land.

The level of significance attributed to individual sites may vary according to a number of factors including the nature and integrity of the heritage items and the landscape in which the site is located. The views of the Aboriginal representatives on the cultural significance of recorded sites were sought during the field survey and review of the draft report. The documented opinions are based on feedback received from representatives of the registered Aboriginal parties and may not reflect the views of the Aboriginal community as a whole.

Aboriginal people of the Lower Darling region are generally concerned about any development that might impact upon Aboriginal cultural heritage and other values on land that is traditionally theirs. All land has high cultural significance for individual Aboriginal people and for the Aboriginal community collectively. It should also be noted that any development upon, or disturbance of land is contrary to principal Aboriginal beliefs regarding land, its values and its inherent cultural significance.

The Barkandji Aboriginal community is particularly concerned about the preservation of Aboriginal cultural heritage sites. However, the RAPs involved in this assessment did not have any specific information pertaining to the Buronga Landfill Expansion area regarding Aboriginal cultural heritage. In particular, representatives of the RAPs involved in the field survey thought the Buronga Landfill Expansion area was unlikely to contain abundant physical remains of past Aboriginal occupation, due to the past disturbance by sand quarrying.

9.3 ASSESSMENT OF SCIENTIFIC SIGNIFICANCE

A number of criteria are used to assess the scientific or archaeological significance of a site. These include the integrity of a site, its structure and contents. All of these criteria combine to give a site its value as a research tool for archaeologists. In addition to the above criteria, a site may also be of scientific significance because of its representativeness or rarity. It is a basic tenet of archaeology that any site which is not represented elsewhere is of great value because archaeologists are concerned with preserving a representative sample of all site types for future generations.

9.3.1 Site Integrity

Site integrity refers to its state of preservation or condition. A site can be disturbed through a number of factors including natural erosional processes, destructive land use practices or repeated use of a site in the past by both humans and animals. Sites or landscapes in good physical condition are generally able to provide information on spatial relationships between (for example) stone artefacts, other remains, chronological units if present, and landscape settings:

- The connectedness of individual sites or landscapes – is the content, site or landscape part of a complex of related sites or landscapes?
- The potential of a site or landscape to provide a relative or absolute chronology extending back into the past, i.e. stratified sequences of cultural materials and/or dateable materials such as organic remains (radiocarbon dating), or sealed or cultural deposits (optical or thermoluminescence).
- The ability of the site or landscape to provide a large sample size (large numbers of stone artefacts, art motifs, grinding grooves, etc.) about which statistically significant statements can be made.

Assessment values for site integrity are set out below:

highly disturbed or poorly preserved with little research potential.

moderate	some disturbance but remaining cultural material allows for some research potential.
high	little or no disturbance to site, good preservation and considerable research potential.

In terms of site integrity, the Aboriginal objects would rate low. This assessment is based on the degree of disturbance noted during the investigation. The stone artefacts were identified modified contexts within cleared areas. They have also been disturbed by repeated traffic of hooved animals and vehicles, coupled with erosion by wind and water.

9.3.2 Site Structure

Site structure refers to the physical dimensions of a site (i.e. its area and depth or stratification). A large site or a site with stratified deposits usually has more research potential than a small site or surface scatter. In some instances, however, specific research questions may be aimed at smaller sites in which case they would be rated at a higher significance than normal.

low	small surface scatters with no stratified deposit.
moderate	medium to large surface scatters with or without stratification.
high	large <i>in situ</i> surface scatters, any site with stratified deposit.

The shallow soils over almost all of the study area, coupled with the degree of past disturbance from land clearing and soil stripping for quarrying and pastoralism, means that *in situ* subsurface cultural deposits are improbable and unlikely at the stone artefact site. The potential for significant sub-surface deposits that provide intact chronological sequences is assessed to be low based on the soil profiles within the extent of the study area. The one Aboriginal object found forms a lag deposit on a scalded surface. The surface of the site is degrading.

The isolated artefact sites are small in size and have a low site structure.

9.3.3 Site Contents

Site contents refers to the range and type of occupation debris found in a site. Generally, sites that contain a large and varied amount of organic and non-organic material are considered to have greater research potential than those sites with small, uniform artefacts.

low	small amount and low diversity of cultural material.
moderate	medium amount and diversity of cultural material.
high	large and diverse amount of cultural material.

The original cultural material of the sites recorded at the study area have been exposed to weathering. Only single stone artefacts remain at the open sites, with no organic materials preserved. The stone artefact assemblages are represented by a single flake, angular fragment and broken muller. Artefact densities are very low.

The isolated finds rate low by the site contents criterion.

9.3.4 Site Representativeness and Rarity

Representativeness or rarity refers to how often a particular site type occurs in an area and requires some knowledge of the background archaeology of the area in which the study is being undertaken. Sites that are representative of the local and regional archaeological record may have value for that reason and if a site is rare or unique in some way then it is *ipso facto* significant (Bowdler 1983). Whether items are of rare or common forms will depend to some extent on the variables used to distinguish them. Open sites, for example, may be distinguished from grinding grooves or scarred trees according to the general type of evidence present (e.g. stone artefacts distinguishable from trees with marks or grooves on rock platforms). To assess rarity and representativeness site type can be used initially, then this category subdivided until a satisfactory level of (dis)similarity is achieved. Within the general group “stone artefact scatters”, sites may be distinguished according to other variables, such as their content, or their landscape setting. Technically, an assessment of representativeness should identify both what is typical or common as well as what is rare.

low	many of the same site type occurring in a single area or region.
moderate	site type occurs elsewhere but not in great quantity or with good preservation.
high	site type is rare or unique.

On the basis of the results of previous archaeological investigations (e.g. Craib 1992) and information held on the AHIMS site register it is clear that stone artefacts are widespread in the region. The isolated finds located in the study area are therefore not unique and are well represented outside the study area.

9.3.5 Educational Value

The value of archaeological sites to the general public is generally assessed by their potential to educate the public about the Aboriginal past. The stone artefact sites rank low by this criterion. They are small, isolated and unlikely to attract particular interest in Aboriginal heritage.

9.4 AESTHETIC SIGNIFICANCE

Aesthetic significance relates to the scale, form, materials, texture, colour, space and relationship of the components of the place. The relationship of the place with its setting is equally important.

The stone artefacts are subdued features in the landscape and lack any appreciable aesthetic value.

9.5 HISTORIC SIGNIFICANCE

A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase or activity. It may also have historic value as the site of an important event.

For any given place, the significance will be greater where evidence of the association or event survives *in situ*, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment (Australia ICOMOS 1988).

The historic value of the Aboriginal archaeological sites in the study area largely stems from their importance in providing evidence of Aboriginal peoples' association with the area. Archaeological and ethno-historical sources show that past Aboriginal people frequented specific places within the region such as the stone artefact sites in the study area for habitation and to manufacture lithic implements.

9.6 SUMMARY OF ARCHAEOLOGICAL SIGNIFICANCE

The following significance assessment is based on the scientific or research value and is not based on the insight of Aboriginal people for their cultural significance assessment of these sites. The registered Aboriginal parties have been requested to provide comment on the cultural significance of the study area and the recorded sites throughout the consultation process (Section 4). The study area has limited potential to provide archaeological information as it contains few isolated stone artefacts. The overall study area is assessed as containing low significance due to the paucity of sites present and the way in which this information contributes to the nature of Aboriginal land use in the region. Table 6 provides significance ratings for the known Aboriginal sites within the study area.

Table 6. Significance Ratings for Aboriginal objects

AHIMS Site Number	Site Name	Significance Rating for Individual Criterion				Overall Archaeological Significance Rating
		Scientific	Aesthetic	Social	Historical	
46-3-0203	Buronga Landfill Artefact 1	Low	Low	Low	Low	Low
46-3-0204	Buronga Landfill Artefact 2	Low	Low	Low	Low	Low
46-3-0205	Buronga Landfill Artefact 3	Low	Low	Low	Low	Low

10 IMPACT ASSESSMENT

In accordance with the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH, 2011), the principles of ecologically sustainable development were considered in assessing the likely harm of the Buronga Landfill Expansion to Aboriginal objects.

Four Aboriginal objects have been identified in the Buronga Landfill Expansion area. One of these Aboriginal objects has already been harmed by the previous construction of a borrow pit under a previous AHIP. The other three Aboriginal objects are outside direct disturbance areas for the proposal (Figure 19).

The potential for previously unidentified Aboriginal cultural heritage to occur in the Buronga Landfill Expansion area is also considered in Section 10.4.

10.1 POTENTIAL DIRECT IMPACTS

The landfill operation would disturb the current land surface and would directly impact archaeological material associated with the affected landforms and their landscape context. The proposal would result in the direct disturbance of approximately 35 ha of land.

Such impacts on archaeological values typically fall into three categories:

- the loss of information which could otherwise be gained by conducting research today;
- the loss of the archaeological resource for future research using methods and addressing questions not available today; and
- the permanent loss of the physical record.

These impacts can usually be mitigated to various degrees, depending on the nature and significance of the cultural heritage. Where sites are of low significance, their destruction (without salvage) may have little consequence. This could be due to the lack of useful information that could be gained from research, or the availability of many equivalent and alternative sites for study.

Sites with greater significance may be the subject of archaeological investigation prior to their disturbance. This allows for the salvage of information, and the recovery of a sample of artefactual materials according to current methods and research priorities. Sites and site groupings that are common elsewhere may not require the same degree of salvage attention as those which are rare, of high significance, and subject to active deterioration.

Salvage investigations can provide for the discovery of new knowledge about the Aboriginal occupation of an area. Despite the loss of physical evidence involved, the information gained can in turn aid the interpretation and better management of the remaining archaeological resource.

10.2 POTENTIAL INDIRECT IMPACTS

In areas where the proposed works for the proposal would not involve significant earthmoving, impacts may be limited to minor surface disturbance, limited disturbance of the associated substrates or landforms and no significant alteration of the landscape context.

Potential indirect impacts to archaeological sites could include the following:

- deposition of dust generated by earthworks and vehicular traffic;
- accidental disturbance by peripheral activities; and
- inappropriate visitation including the unauthorized removal of Aboriginal objects.

10.3 CULTURAL HERITAGE POTENTIALLY IMPACTED BY THE PROPOSAL

Four Aboriginal cultural heritage sites comprising isolated finds of stone artefacts have been identified during the field surveys of the study area. The impact of the proposal on these sites is determined by the construction of the Buronga Landfill Expansion and the degree of harm this would cause.

The three Aboriginal objects newly identified during this assessment are outside direct disturbance areas for the proposal (Figure 19).

Harm can be avoided for these three Aboriginal cultural heritage sites and therefore the consequence of harm is no loss in value (Table 7).

One isolated find of a stone artefact (AHIMS site number 46-3-0192) has already been harmed by the previous construction of a borrow pit under a previous AHIP (Table 7).

Table 7. Impacts on Aboriginal objects

AHIMS Site Number	Site Name	Type of Harm	Degree and Consequence of Harm
46-3-0192	Buronga Landfill Artefact Scatter 1	Direct (already harmed under AHIP)	Total loss of value (already harmed under AHIP)
46-3-0203	Buronga Landfill Artefact 1	None	No loss of value
46-3-0204	Buronga Landfill Artefact 2	None	No loss of value
46-3-0205	Buronga Landfill Artefact 3	None	No loss of value

10.4 POTENTIAL FOR PREVIOUSLY UNIDENTIFIED ABORIGINAL CULTURAL HERITAGE TO OCCUR IN THE STUDY AREA

All of the study area was inspected for cultural heritage sites during the field surveys. It is possible that some archaeology was obscured by grass, leaf-litter or soil. Such previously unidentified features, should they occur, would probably be additional isolated finds of stone artefacts (based on the predictive model outlined in Section 7.1 and informed by the results of the current survey, summarized in Section 8).

Further sites of a type or significance not previously encountered in the study area are improbable. This is partly attributable to the degree of land surface modification that has occurred since European settlement, as such past disturbance associated with pastoralism and sand

quarrying may have obliterated many archaeological features, had they occurred previously. For example, previous tree clearing and land levelling could have destroyed scarred trees and earthen features such as mounds and hearths and stone arrangements including ceremonial rings. Shell middens were not encountered because most occur within 100 m of sources of permanent freshwater, absent from the study area.

None of the old growth trees present in the areas of proposed disturbance bore any evidence of having had bark or wood removed or carved by Aboriginal people.

The shallow soils of the gently undulating sandplains that comprise the study area, coupled with the degree of past disturbance from land clearing and soil stripping for pastoralism and quarrying, means that significant *in situ* subsurface cultural deposits are improbable. The isolated artefact in the study area forms a lag deposit on an eroded land surface, which is still degrading.

The study area does not contain culturally sensitive landforms such as lunettes or source-bordering sand dunes where subsurface Aboriginal cultural deposits (e.g. burials) have been recorded previously.

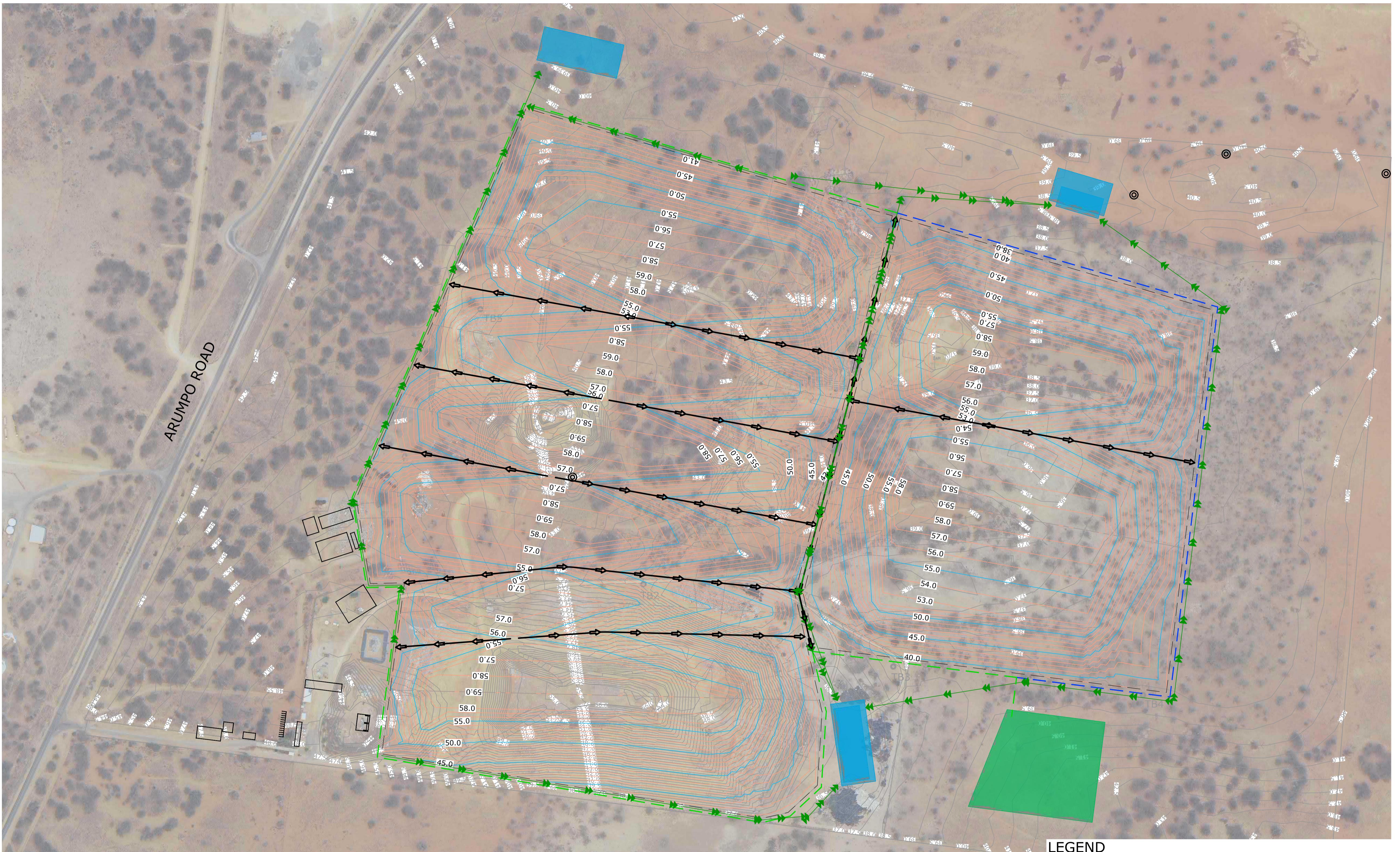
A strategy for managing any newly identified Aboriginal objects during the life of the proposal is outlined in Section 11.3.

10.5 POTENTIAL CUMULATIVE IMPACTS OF THE PROPOSAL

Considering the nature and scale of previous and ongoing land disturbance processes in the region (predominately due to past pastoral and quarrying activities), the nature and extent of identified Aboriginal heritage sites and archaeological potential in the study area and the nature and scale of impacts associated with the proposal, it is considered that the proposal would not substantially increase cumulative impacts to Aboriginal heritage in the region. Notably, harm would be avoided to the three Aboriginal cultural heritage sites newly identified during this assessment

10.6 FLEXIBILITY OF THE DESIGN OF THE PROPOSAL

The locations of the proposed Buronga Landfill Expansion components are currently within their optimum design locations, having already been reduced in footprint to minimize disturbance to threatened ecological communities.



LEGEND

40.0	EXISTING CONTOUR (0.5m INTERVAL)
51.0	DESIGN CONTOUR MAJ (5.0m INTERVAL)
50.1	DESIGN CONTOUR MIN (1.0m INTERVAL)
—	STAGE BOUNDARY
—	CAP CROWN
—	CAP DRAIN
↔	STORMWATER DRAIN
—	STAGE 1 SERVICE ALIGNMENT
—	STAGE 2 SERVICE ALIGNMENT

STORMWATER POND
LEACHATE POND
ABORIGINAL ARTIFACT SITE

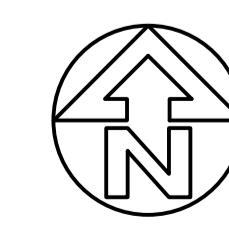
THIS DRAWING IS TO BE VIEWED IN COLOUR AS
SOME FEATURES / SYMBOLS ARE DIFFERENTIATED
BY COLOUR. DRAWING NOT TO BE RELIED ON IF
PRINTED IN GREyscale.

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100mm ON ORIGINAL DRAWING - DO NOT SCALE DRAWING

SHEET SIZE

A1



COORDS: MGA94 ZONE 54
DATUM: ALL LEVELS TO A.H.D.
SCALE: AS SHOWN
SURVEYED: PRICEMERRET
SURVEY DATE: 03.03.21
APPROVED / PROJECT LEADER

A FOR INFORMATION
REV 14.09.21
AMENDMENT / REASON FOR ISSUE
DATE DES. DWN.

PUBLIC UTILITIES:
THE SERVICES SHOWN ARE DERIVED FROM PLANS OBTAINED FROM THE RELEVANT SERVICE AUTHORITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE WITH THE RELEVANT SERVICE AUTHORITIES FOR CONFIRMATION OF SERVICES AND THEIR LOCATION BEFORE EXCAVATION WORK COMMENCES.

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WENTWORTH SHIRE COUNCIL
BURONGA LANDFILL EXPANSION
FIGURE 19
STORMWATER MANAGEMENT STAGE 2
FILENAME: 202597 CONCEPT DESIGN.DWG
PROJECT NUMBER 202597
DRAWING NUMBER 014
REVISION A

11 MANAGEMENT STRATEGIES FOR CULTURAL HERITAGE

11.1 INTRODUCTION

This section presents proposed strategies for the management of cultural heritage values within the study area that may be subject to direct impacts by the proposal.

Based on the known and predicted Aboriginal heritage values within the study area, it is concluded that impacts to Aboriginal heritage as a result of the proposal can be effectively managed or mitigated through the following actions and strategies.

The measures presented below are considered best practice. Their effectiveness and reliability is demonstrated by their continued use and inclusion in management plans and strategies developed in consultation with the Aboriginal community and to the satisfaction of OEH.

11.2 MANAGEMENT OF CULTURAL HERITAGE NEAR THE DISTURBANCE AREAS

Based on the results of this assessment including involvement of representatives of the RAPs, it is a requirement that the following measures be undertaken to manage the impact of surface disturbance on Aboriginal object within the study area:

- Wentworth Shire Council avoid harm to the three isolated finds of stone artefacts (Buronga Landfill Artefact 1-3; AHIMS site numbers 46-3-0203, 46-3-0204, 46-3-0205) near the proposed disturbance areas. The closest of these is approximately 30 m from a proposed stormwater pond. Harm must be avoided by erecting permanent protective barrier fences around the sites and ensuring the fences are properly maintained. Personnel must be directed not to enter fenced areas except to complete appropriate land management including maintenance and weed control.

11.3 MANAGEMENT OF PREVIOUSLY UNIDENTIFIED CULTURAL HERITAGE DURING THE COURSE OF THE ACTIVITY

It is possible that some Aboriginal objects obscured by grass, leaf-litter or soil despite the intensive nature of the cultural heritage field surveys, excellent conditions of surface visibility and extensive previous disturbance. Such previously unidentified features, should they occur, would probably be additional isolated finds of stone artefacts (based on the predictive model outlined in Section 7.1 and informed by the results of the current survey, summarized in Section 8).

In the unlikely event any previously unidentified Aboriginal cultural heritage places or objects are encountered during the course of proposed works, all activities likely to affect the places or objects shall cease and management measures and/or salvage works will be developed in consultation with NSW Heritage and the RAPs cognisant of the cultural significance of the site;

11.4 HERITAGE MANAGEMENT PLAN

The optimal means of co-ordinating and implementing the proposed management strategies is to integrate them into a single program and document in the form of a *Heritage Management Plan (HMP)*. The HMP would reflect the proposed management of the cultural heritage sites within the Buronga Landfill Expansion. The HMP would cover all relevant actions and requirements to be conducted during the activity. The HMP would remain active for the Project life and define the tasks, scope and conduct of all cultural heritage management activities.

11.5 GENERAL RECOMMENDATIONS

11.5.1 Introduction

It is recommended that the following general approach be taken to manage Aboriginal cultural heritage during the life of the proposal:

- Ongoing consultation with the Aboriginal community throughout the life of the proposal. It is recommended that this comprise as a minimum an emailed annual project update.
- Wentworth Shire Council should provide opportunities for Aboriginal community members to access the known Aboriginal site located within the study area (e.g. for cultural reasons or as part of scheduled field activities) in accordance with Occupational Health and Safety requirements and with a minimum of 5 days advance notice.
- Erosion and sediment control works be undertaken in accordance with the requirements of the development consent and in consideration of other Aboriginal cultural heritage management measures.
- Any new Aboriginal heritage sites identified during the development of the proposal be registered with Heritage NSW in consultation with the Aboriginal community.
- A record of known Aboriginal heritage sites, their status and location be maintained by Wentworth Shire Council.

11.5.2 Role of the Local Aboriginal Community

Wentworth Shire Council is committed to involving the local Aboriginal community as an integral participant in the management of Aboriginal cultural heritage values in the study area. The strategies outlined in this report have incorporated the views of community representatives (Section 4.2.1).

It is recommended Wentworth Shire Council engages in ongoing consultation with the Aboriginal community throughout the life of the proposal. This should occur at least annually and comprise as a minimum an emailed project update.

11.5.3 Site Management and Cultural Awareness Training

It is recommended that Wentworth Shire Council provides training to all on-site personnel regarding the Aboriginal cultural heritage management strategies relevant to their employment tasks.

11.6 SUMMARY RECOMMENDATIONS

Based on the results of this cultural heritage investigation and consultation with representatives of the local Aboriginal community, the following recommendations are provided for Wentworth Shire Council to implement:

- Wentworth Shire Council avoid harm to the three isolated finds of stone artefacts (Buronga Landfill Artefact 1-3) near the proposed disturbance areas. This requires erection of permanent protective barriers around the Aboriginal objects.
- If any previously unidentified Aboriginal objects are encountered during construction of the proposal all works likely to affect the material must cease immediately and Heritage NSW and the RAPs consulted about an appropriate course of action prior to recommencement of work.
- In the unlikely event that human skeletal remains are encountered during construction the proposal, all work with the potential to impact the remains must cease. Remains must not be handled or otherwise disturbed except to prevent further disturbance. If the remains are thought to be less than 100 years old the Police or the State Coroner's Office (tel: 02 9552 4066) must be notified. If there is reason to suspect that the skeletal remains are more than 100 years old and Aboriginal, Wentworth Shire Council should contact the Environmental Line (tel: 131 555) for advice. In the unlikely event that an Aboriginal burial is encountered, strategies for its management would need to be developed with the involvement of the local Aboriginal community.
- Wentworth Shire Council should provide training to all on-site personnel regarding the Aboriginal cultural heritage management activities strategies relevant to their employment tasks.
- Wentworth Shire Council should continue to involve the registered Aboriginal parties and any other relevant Aboriginal community groups or members in matters pertaining to the proposal.
- Wentworth Shire Council should co-ordinate and implement these recommendations by integrating them into a single programme and document them in the form of a Heritage Management Plan (HMP). The HMP should remain active for the entire Project life and define the tasks, scope and conduct of all Aboriginal cultural heritage management activities.

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APPENDICES

Appendix 1. Glossary

Appendix 2. Consultation Log

Appendix 3. Correspondence to Aboriginal Community Stakeholders

Appendix 4. Correspondence from Aboriginal Community Stakeholders

Appendix 5. AHIMS Register Search

APPENDIX 1. GLOSSARY

Archaeological site - A place with evidence of past human activity. This evidence may include Aboriginal and/or historic artefacts, features, structures or organic traces.

Artifact scatter - A surface scatter of Aboriginal or historic cultural material. Scatters of stone artefacts are a common archaeological site type. These scatters may also contain charcoal, discarded animal bones, shell and ochre.

Assemblage - A collection of artefacts from a single archaeological site.

Burial site - A place with a concentration of human remains. Ochre, stone tools, charcoal and grave goods may be associated with burials. Most burial sites are found in sand dunes but dead trees, caves and rock shelters were also used.

Ceremonial ground - Place that may be associated with initiation ceremonies, meetings or sacred rituals. Stone arrangements may be present, including cairns, stone circles or standing slabs of rock.

Chert - A fine-grained opaline rock ranging in colour from white to black, but most often grey, brown, grayish brown and light green to rusty red.

Core - A piece of stone from which flakes have been removed. They usually have negative flake scars that have resulted from the removal of flakes.

Cultural material - Any material remains or objects resulting from human activity.

Debitage - Any waste material including flakes and cores produced during the manufacture of chipped stone tools.

Flake - A piece of stone detached from a core that typically displays a striking platform, bulb of percussion and flake scars on the ventral surface.

Flaked piece - Small fragments of stone resulting from the manufacture of stone tools. A striking platform or bulb of percussion may not be evident.

Ground surface visibility - The amount of bare ground exposed, usually expressed as a percentage.

Hearth - The remains of a campfire containing charcoal, discoloured soil, and possibly, hearthstones, heat retainers or the remains of animals or shellfish cooked and consumed at the campsite.

Hearthstone – Stone cobble placed in a campfire to retain heat for cooking. The types of stone used as hearthstones in western Victoria includes calcrete and sandstone.

Heat retainer - Nodule of baked clay, thought to have been placed in campfires to retain heat for cooking.

in situ - An artefact or other feature that has not been disturbed from its original position.

Mound - Raised areas of earth ranging from 3 to 35m in diameter and from 0.5m to 2m in height. Earth oven material, stone artefacts, food refuse and the remains of hut foundations have been recovered from excavated earth mounds in the central and western parts of Victoria.

Ochre - Soft varieties of the iron oxides goethite, limonite or haematite usually coloured red or yellow and used as pigment for painting.

Quarry - An outcrop of stone or ochre where Aboriginal people have extracted the raw material for use or trade. Stone quarries are identifiable by a dense scatter of broken stone and flakes or consist of pits or hollows where material has been dug out of the ground.

Quartz – A silica mineral resistant to weathering because of its hardness. It is commonplace in the landscape as a consequence.

Quartzite - A metamorphic rock formed by the re-crystallization of quartz.

Retouch - A stone artefact with fine, secondary flaking along one or more edges.

Scarred tree - A tree with a scar on its trunk caused by bark removal.

Shell midden - A surface scatter or heap of discarded shell often with charcoal, animal bones and stone artefacts. Middens may be found near coastlines, rivers, creeks, swamps and ancient lakes.

Silcrete - A hard, fine-grained rock composed of silica cement.

Stone feature - Cairns, rock wells, grinding grooves, stone structures, fish traps and stone arrangements are examples of stone features.

Stratified deposit - Material that has been laid down over time forming a sequence of events.

Survey - An inspection of land either by foot or vehicle for the purpose of identifying archaeological sites.

Transect - A predetermined area or a path that directs the course of a survey.

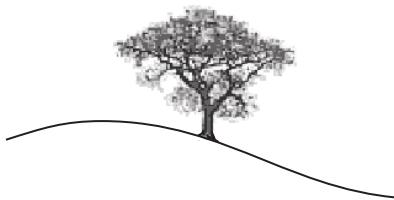
APPENDIX 2. CONSULTATION LOG

DATE	ORGANISATION CONTACTED	ORGANISATION CONTACTED	HOW CONTACTED	CONTACTED BY	ORGANISATION REPRESENTED	NATURE OF CONSULTATION
03/05/2021	Step 1 Government Organisations	Heritage NSW, Dareton Local Aboriginal Land Council, Wentworth Shire Council, Western LLS, NTSCORP, National Native Title Tribunal, Registrar of Aboriginal Land Rights Act 1983	Email	Matt Cupper	Wentworth Shire Council	Step 1 letters sent out to relevant organisation requesting details of Aboriginal persons or groups who hold cultural knowledge relevant to, or who have a right or interest in, determining the cultural heritage significance of Aboriginal object(s) and/or place(s) in the Area of Interest for the Buronga Landfill Expansion
06/05/2021	Matt Cupper	Wentworth Shire Council	Email	Maeve Parker	NTSCORP	Response to Step 1 letter received.
04/05/2021	Matt Cupper	Wentworth Shire Council	Email	Pam Handy	Dareton Local Aboriginal Land Council	Response to Step 1 letter received.
04/05/2021	Matt Cupper	Wentworth Shire Council	Email	Daniel Clegg	Heritage NSW	Response to Step 1 letter received.
07/05/2021	Matt Cupper	Wentworth Shire Council	Email	Hillary Dye	Wentworth Shire Council	Response to Step 1 letter received.

DATE	ORGANISATION CONTACTED	ORGANISATION CONTACTED	HOW CONTACTED	CONTACTED BY	ORGANISATION REPRESENTED	NATURE OF CONSULTATION
05/05/2021	Aboriginal stakeholders identified by relevant government organisations	Barkindji Maroura Elders Council, Barkandji Native Title Group Aboriginal Corporation, Ta-Ru Board of Management/Mauraura Barkindji Traditional Owners, Dareton Local Aboriginal Land Council Willandra Lakes 2 Traditional Tribal Group Elders Council, Pappin Family Aboriginal Corporation, Gary Pappin, Wakool Aboriginal Corporation, Mary-Ann Marton,	Email/Post	Matt Cupper	Wentworth Shire Council	Step 2 letters sent out to groups/individual identified during Step 1 inviting Aboriginal persons or groups who hold cultural knowledge relevant to, or who have a right or interest in, determining the cultural heritage significance of Aboriginal object(s) and/or place(s) in the Area of Interest to register an interest in the Buronga Landfill
05/05/2021	na	na	Public Notice	Matt Cupper	Wentworth Shire Council	A public notice was published in the Sunraysia Daily on 5 May 2021, inviting Aboriginal persons or groups who hold cultural knowledge relevant to, or who have a right or interest in, determining the cultural heritage significance of Aboriginal object(s) and/or place(s) in the Area of Interest to register an interest in the Buronga Landfill.

DATE	ORGANISATION CONTACTED	ORGANISATION CONTACTED	HOW CONTACTED	CONTACTED BY	ORGANISATION REPRESENTED	NATURE OF CONSULTATION
21/05/2021	Registered Aboriginal Parties	Barkandji Native Title Group Aboriginal Corporation, Ta-Ru Board of Management/Mauraura Barkindji Traditional Owners, Dareton Local Aboriginal Land Council	Email	Matt Cupper	Wentworth Shire Council	Field survey invitation was provided to each of the RAPs and a copy of the Proposed Methodology was provided for review and comment.
13/06/2021	Daniel Clegg	Heritage NSW	Email	Matt Cupper	Wentworth Shire Council	List of RAPs provided to the OEH.
13/06/2021	Pam Handy	Dareton Local Aboriginal Land Council	Email	Matt Cupper	Wentworth Shire Council	List of RAPs provided to the Dareton LALC.
23/06/2021	Representatives of Registered Aboriginal Parties	Representatives of Registered Aboriginal Parties	Field Surveys	Matt Cupper	Landscape	Field survey held for the Buronga Landfill Expansion.
07/07/2021	Registered Aboriginal Parties	Barkandji Native Title Group Aboriginal Corporation, Ta-Ru Board of Management/Mauraura Barkindji Traditional Owners, Dareton Local Aboriginal Land Council	Email	Matt Cupper	Wentworth Shire Council	Copy of draft ACHA was provided for review and comment.

APPENDIX 3. CORRESPONDENCE TO ABORIGINAL COMMUNITY STAKEHOLDERS



3 May 2021

Dr Ken Lum
Manager, Research
NTSCORP Ltd
PO Box 2105
Strawberry Hills NSW 2012

Dear Dr Lum,

**Re: Wentworth Shire Council Buronga Landfill Expansion, Lot 1 DP1037845
Arumpo Road, Buronga – Notification to Register Interest**

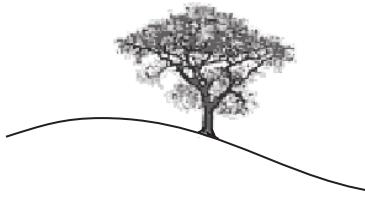
Wentworth Shire Council intends to upgrade the municipal landfill at Lot 1 DP1037845, Arumpo Road, Buronga. Works include excavation of new pits, modified internal infrastructure and hardstands and stormwater drainage works. The project area is approximately 5 km north of Buronga, NSW (see Figure 1, attached).

Landscape on behalf of Wentworth Shire Council would like to consult with all Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area. Could NTSCORP Ltd provide contact details of any known Aboriginal groups or individuals who may hold cultural knowledge relevant to the proposed project area, please?

I would appreciate if you could provide any information regarding Aboriginal stakeholders by 5 pm Monday 17 May 2021 to me: Dr Matt Cupper, Landscape, 178 Midgen Flat Road Broken Head 2481; e-mail: landscape@telstra.com; tel: 0408 006 690.

Yours sincerely,

Dr Matt Cupper
Principal



3 May 2021

CEO
Western Local Land Services
PO 363
Buronga NSW 2739

Dear Sir/Madam

Re: Wentworth Shire Council Buronga Landfill Expansion, Lot 1 DP1037845 Arumpo Road, Buronga – Notification to Register Interest

Wentworth Shire Council intends to upgrade the municipal landfill at Lot 1 DP1037845, Arumpo Road, Buronga. Works include excavation of new pits, modified internal infrastructure and hardstands and stormwater drainage works. The project area is approximately 5 km north of Buronga, NSW (see Figure 1, attached).

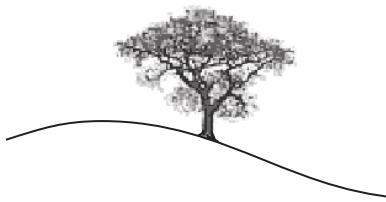
Landscape on behalf of Wentworth Shire Council would like to consult with all Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area. Could Western Local Land Services provide contact details of any known Aboriginal groups or individuals who may hold cultural knowledge relevant to the proposed project area, please?

I would appreciate if you could provide any information regarding Aboriginal stakeholders by 5 pm Monday 17 May 2021 to me: Dr Matt Cupper, Landscape, 178 Midgen Flat Road Broken Head 2481; e-mail: landscape@telstra.com; tel: 0408 006 690.

Yours sincerely,

Dr Matt Cupper

Principal



3 May 2021

Pam Handy
CEO
Dareton Local Aboriginal Land Council
PO Box 7
Dareton NSW 2717

Dear Pam,

**Re: Wentworth Shire Council Buronga Landfill Expansion, Lot 1 DP1037845
Arumpo Road, Buronga – Notification to Register Interest**

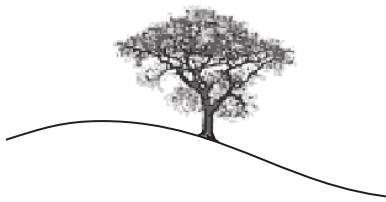
Wentworth Shire Council intends to upgrade the municipal landfill at Lot 1 DP1037845, Arumpo Road, Buronga. Works include excavation of new pits, modified internal infrastructure and hardstands and stormwater drainage works. The project area is approximately 5 km north of Buronga, NSW (see Figure 1, attached).

Landscape on behalf of Wentworth Shire Council would like to consult with all Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area. Could Dareton Local Aboriginal Land Council provide contact details of any known Aboriginal groups or individuals who may hold cultural knowledge relevant to the proposed project area, please?

I would appreciate if you could provide any information regarding Aboriginal stakeholders by 5 pm Monday 17 May 2021 to me: Dr Matt Cupper, Landscape, 178 Midgen Flat Road Broken Head 2481; e-mail: landscape@telstra.com; tel: 0408 006 690.

Yours sincerely,

Dr Matt Cupper
Principal



3 May 2021

Daniel Clegg
Aboriginal Heritage Planning Support Officer
Heritage NSW
PO BOX 1040
Albury 2640

Dear Dan,

Re: Wentworth Shire Council Buronga Landfill Expansion, Lot 1 DP1037845 Arumpo Road, Buronga – Notification to Register Interest

Wentworth Shire Council intends to upgrade the municipal landfill at Lot 1 DP1037845, Arumpo Road, Buronga. Works include excavation of new pits, modified internal infrastructure and hardstands and stormwater drainage works. The project area is approximately 5 km north of Buronga, NSW (see Figure 1, attached).

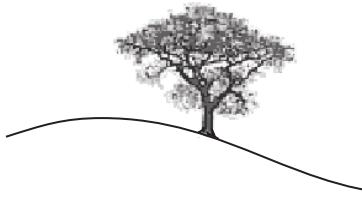
Landscape on behalf of Wentworth Shire Council would like to consult with all Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area. Could Heritage NSW provide contact details of any known Aboriginal groups or individuals who may hold cultural knowledge relevant to the proposed project area, please?

I would appreciate if you could provide any information regarding Aboriginal stakeholders by 5 pm Monday 17 May 2021 to me: Dr Matt Cupper, Landscape, 178 Midgen Flat Road Broken Head 2481; e-mail: landscape@telstra.com; tel: 0408 006 690.

Yours sincerely,

Dr Matt Cupper

Principal



3 May 2021

Office of the Registrar

NSW Aboriginal Land Rights Act 1983

PO Box 112

Glebe 2037

Dear Sir/Madam,

**Re: Wentworth Shire Council Buronga Landfill Expansion, Lot 1 DP1037845
Arumpo Road, Buronga – Notification to Register Interest**

Wentworth Shire Council intends to upgrade the municipal landfill at Lot 1 DP1037845, Arumpo Road, Buronga. Works include excavation of new pits, modified internal infrastructure and hardstands and stormwater drainage works. The project area is approximately 5 km north of Buronga, NSW (see Figure 1, attached).

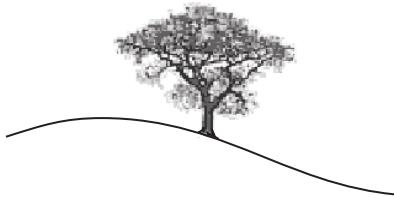
Landscape on behalf of Wentworth Shire Council would like to consult with all Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area. Could Office of the Registrar, NSW *Aboriginal Land Rights Act 1983* provide contact details of any known Aboriginal owners relevant to the proposed project area, please?

I would appreciate if you could provide any information regarding Aboriginal stakeholders by 5 pm Monday 17 May 2021 to me: Dr Matt Cupper, Landscape, 178 Midgen Flat Road Broken Head 2481; e-mail: landscape@telstra.com; tel: 0408 006 690.

Yours sincerely,

Dr Matt Cupper

Principal



3 May 2021

Peter Kozlowski
General Manager
Wentworth Shire Council
26/24-28 Adelaide Street
Wentworth NSW 2648

Dear Peter,

**Re: Wentworth Shire Council Buronga Landfill Expansion, Lot 1 DP1037845
Arumpo Road, Buronga – Notification to Register Interest**

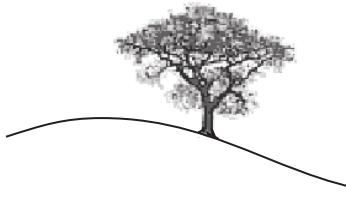
Wentworth Shire Council intends to upgrade the municipal landfill at Lot 1 DP1037845, Arumpo Road, Buronga. Works include excavation of new pits, modified internal infrastructure and hardstands and stormwater drainage works. The project area is approximately 5 km north of Buronga, NSW (see Figure 1, attached).

Landscape on behalf of Wentworth Shire Council would like to consult with all Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area. Could Wentworth Shire Council provide contact details of any known Aboriginal groups or individuals who may hold cultural knowledge relevant to the proposed project area, please?

I would appreciate if you could provide any information regarding Aboriginal stakeholders by 5 pm Monday 17 May 2021p to me: Dr Matt Cupper, Landscape, 178 Midgen Flat Road Broken Head 2481; e-mail: landscape@telstra.com; tel: 0408 006 690.

Yours sincerely,

Dr Matt Cupper
Principal



3 May 2021

National Native Title Tribunal
GPO Box 9973
Perth WA 6848

Dear Sir/Madam,

Re: Wentworth Shire Council Buronga Landfill Expansion, Lot 1 DP1037845 Arumpo Road, Buronga – Notification to Register Interest

Wentworth Shire Council intends to upgrade the municipal landfill at Lot 1 DP1037845, Arumpo Road, Buronga. Works include excavation of new pits, modified internal infrastructure and hardstands and stormwater drainage works. The project area is approximately 5 km north of Buronga, NSW (see Figure 1, attached).

Landscape on behalf of Wentworth Shire Council would like to consult with all Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area. Could the National Native Title Tribunal advise if there are any registered native title claimants, native title holders and registered Indigenous Land Use Agreements in the proposed project area, please?

I would appreciate if you could provide any information regarding Aboriginal stakeholders by 5 pm Monday 17 May 2021 to me: Dr Matt Cupper, Landscape, 178 Midgen Flat Road Broken Head 2481; e-mail: landscape@telstra.com; tel: 0408 006 690.

Yours sincerely,

Dr Matt Cupper

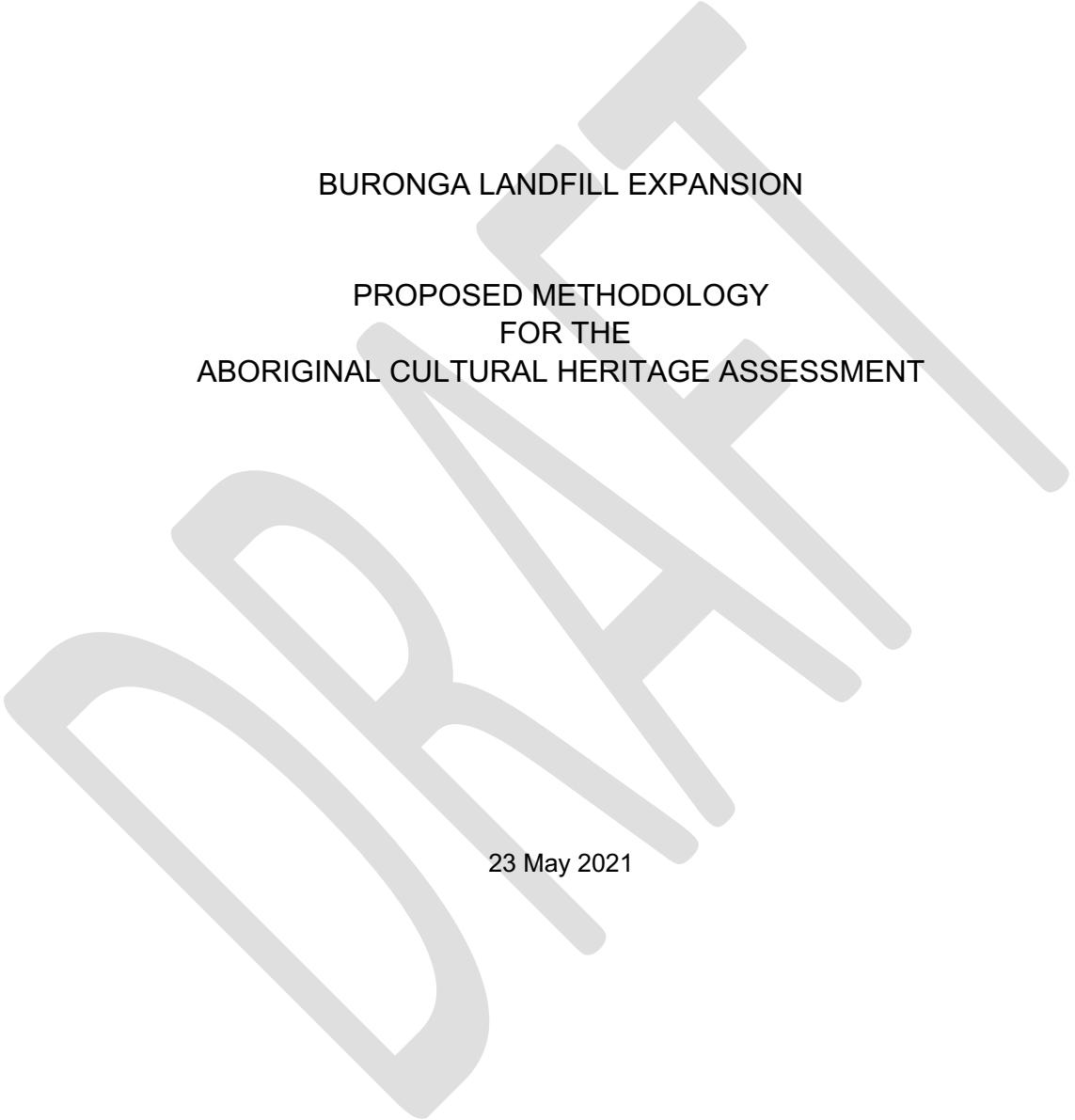
Principal

National Parks and Wildlife Act 1974 (NSW) - Part 6

Wentworth Shire Council intends to expand the Buronga Landfill at 258 Arumpo Road, Buronga. Landskape on behalf of Wentworth Shire Council would like to consult with all Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the project area. The purpose of the consultation is to assist Wentworth Shire Council in the preparation of an Environmental Impact Statement for the proposal.

Contact details:
Landskape, PO Box 1068, Carlton, 3053.

**Closing date for
expressions of interest
5pm, May 19, 2021.**



BURONGA LANDFILL EXPANSION

PROPOSED METHODOLOGY
FOR THE
ABORIGINAL CULTURAL HERITAGE ASSESSMENT

23 May 2021

1 INTRODUCTION

Wentworth Shire Council is planning to apply for an approval under Part 4 Division 4.7 (State Significant Development) of the *Environmental Planning and Assessment Act 1979* to upgrade the municipal landfill at Lot 1 DP1037845, 258 Arumpo Road, Buronga. Works include excavation of new pits, modified internal infrastructure and hardstands and stormwater drainage works. The project area is approximately 5 km north of Buronga, NSW (see Figure 1).

Wentworth Shire Council is seeking to engage with the Aboriginal community as part of the preparation for an Aboriginal Cultural Heritage Assessment (ACHA). Consultation with Aboriginal people and communities will be guided by the Heritage NSW's *Aboriginal cultural heritage consultation requirements for proponents 2010* (NSW Department of Environment, Climate Change and Water [DECCW], 2010a).

Wentworth Shire Council has already completed an Aboriginal cultural heritage assessment with field survey for the Project (Landscape, 2016). This assessment, involving representatives of the Barkindji Native Title Group Aboriginal Corporation, encountered an Aboriginal cultural heritage site (an isolated find of a stone artefact) in the Project area.

1.2 Structure of this Document

Section 2 of this document outlines the Proposed Methodology for the cultural and archaeological assessment of Aboriginal objects, places and/or Aboriginal cultural heritage values within the Project area.

Section 3 outlines the sensitive cultural information management protocol and Section 4 provides further information on the preparation of the ACHA report. Relevant personnel for the assessment are outlined in Section 5.

2 PROPOSED ASSESSMENT METHODOLOGY

The Proposed Methodology for the cultural and archaeological assessment for the ACHA is as follows:

- Conduct a desktop assessment to delineate areas of known and predicted Aboriginal objects, places and/or Aboriginal cultural heritage values, including a detailed review of the previous assessments.
- Identify the Aboriginal cultural heritage values associated with the relevant area through consulting with Aboriginal people with cultural knowledge or responsibilities for Country in which the Project occurs, utilising written, oral research and field investigations.
- The conduct of a cultural and archaeological assessment with representatives of the local Aboriginal community, to identify Aboriginal objects, places and/or Aboriginal cultural heritage values. The field investigation would be carried out by the project archaeologist with the assistance of Aboriginal representatives.
- Record/document any Aboriginal objects, places and/or Aboriginal cultural heritage values within the relevant area and assessment of their significance with representatives of the Registered Aboriginal Parties (RAPs).
- In consultation with the RAPs, develop recommended management and mitigation measures for Aboriginal objects, places and/or Aboriginal cultural heritage values, including documentation (where relevant).
- Provide a consideration of the potential impacts of the Project on Aboriginal objects, places and/or Aboriginal cultural heritage values within the Project area.

- Describe and justify the outcomes and alternatives.
- Document the Aboriginal cultural heritage impact assessment and the recommendations to minimise potential impacts on Aboriginal cultural heritage.
- Provide a copy of the draft ACHA to the RAPs for their review and feedback.
- Documentation of feedback received as part of the cultural assessment from RAPs for presentation in the final ACHA report (subject to the sensitivity of the information provided).

In accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW, 2010a), Wentworth Shire Council requests that RAPs provide, where relevant during the conduct of the ACHA, cultural information regarding:

- whether there are any Aboriginal sites/objects of cultural value to Aboriginal people in the relevant area or surrounds; and
- whether there are any places of cultural value to Aboriginal people in the relevant area or surrounds.

This may include places of social, spiritual and cultural value, historic places with cultural significance, and potential places/areas of historic, social, spiritual and/or cultural significance.

3 SENSITIVE CULTURAL INFORMATION – MANAGEMENT PROTOCOL

In the event that a RAP has sensitive or restricted public access information, it is proposed that Wentworth Shire Council would manage this information (if provided by the Aboriginal community) in accordance with a sensitive cultural information management protocol.

It is anticipated that the protocol would include making note of and managing the material in accordance with the following key limitations/requirements as advised by the relevant RAP at the time of the information being provided:

- any restrictions on access to the material;
- any restrictions on communication of the material;
- any restrictions on the location/storage of the material;
- any cultural recommendations on handling the material;
- any contextual information;
- any names and contact details of persons authorised by the relevant Aboriginal party to make decisions concerning the Aboriginal material and the degree of authorisation;
- any details of any consent given in accordance with customary law;
- the level of confidentiality to be accorded to the material; and
- any access and use by the RAP, of the cultural information in the material.

All RAPs should be aware of the mandatory requirement that all feedback provided must be documented in the final ACHA (DECCW, 2010a), including copies of any submissions received and the proponents response to the issues raised.

4 ABORIGINAL CULTURAL HERITAGE ASSESSMENT

Following consultation on the Proposed Methodology of the cultural and archaeological assessment, and undertaking any required field components, a draft ACHA report will be prepared. The draft ACHA will be provided to all RAPs for their review and comment, and will include:

- details of the Aboriginal objects, places and/or Aboriginal cultural heritage values within the Project area and how they will be impacted by the Project;
- details of the consultation undertaken and how comments received at various times were considered; and
- management and mitigation recommendations drawing on information provided by RAPs and the results of the cultural and archaeological assessments.

5 PERSONNEL

Project Archaeologist: Dr Matt Cupper would be the project archaeologist. Matt has a wide range of experience in cultural and natural heritage management and an academic background in archaeology, geology and botany, including a PhD in the palaeoecology and early Aboriginal occupation of the Darling River. His particular area of expertise is the interaction of Aboriginal people and arid ecosystems in the interior of Australia. As a consultant archaeologist he has been engaged in many management and research-oriented studies of the Murray Darling Basin for industry and government. These have included investigation of the cultural heritage of western and central NSW for mine developments (including the CVO), and archaeological surveys of water supply and irrigation infrastructure along the Lachlan, Macquarie, Murrumbidgee, Murray and Darling Rivers.

Aboriginal Field Representatives: It is anticipated that Aboriginal field representatives would be engaged for the duration of the cultural heritage field survey (although this number may be subject to change based on the extent of the area requiring survey or due to workplace health and safety constraints). Aboriginal field personnel may be engaged on a rotational basis (e.g. a different team of representatives each day) as required.

6 REFERENCES

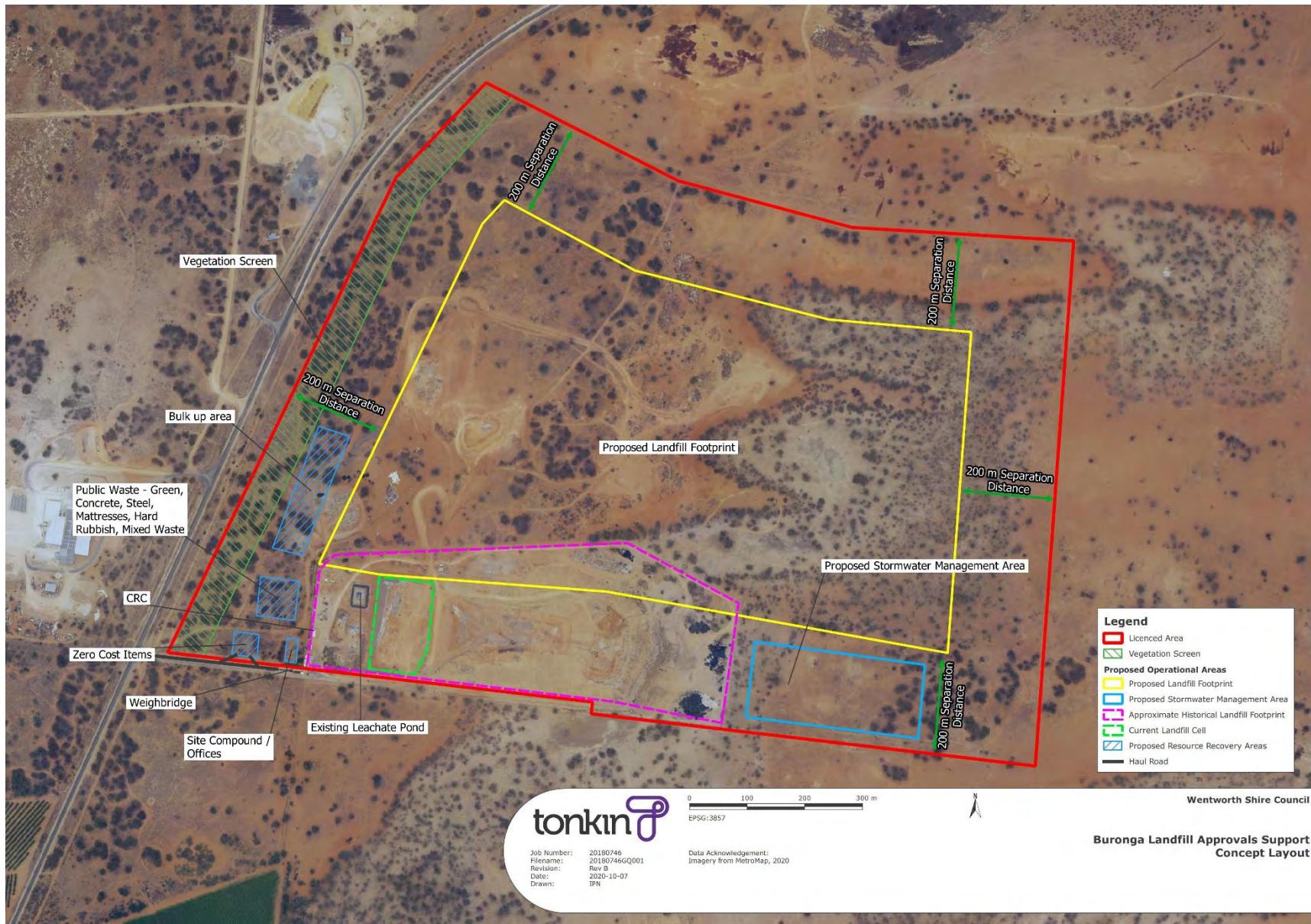
Landskape (2016). *Aboriginal cultural heritage assessment for the Buronga Landfill Expansion*. Report to Wentworth Shire Council.

Department of Environment, Climate Change and Water (DECCW) (2010a) *Aboriginal cultural heritage consultation requirements for proponents 2010*.

Department of Environment, Climate Change and Water (DECCW) (2010b). *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*. NSW Department of Environment, Climate Change and Water, Sydney.

Office of Environment and Heritage (OEH) (2011). *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW*. Office of Environment and Heritage, Sydney.

FIGURES



APPENDIX 4. CORRESPONDENCE FROM ABORIGINAL COMMUNITY STAKEHOLDERS



Dr Matt Cupper
Principal
Landscape
178 Midgen Flat Road
BROKEN HEAD NSW 2481
via email: landscape@telstra.com

Our reference: DOC21/346933
Your reference:

Dear Matt

WRITTEN NOTIFICATION OF PROPOSAL AS REQUIRED UNDER DECCW ABORIGINAL CULTURAL HERITAGE CONSULTATION REQUIREMENTS FOR PROPONENTS 2010

Subject: Registration of Aboriginal Interests – Buronga Landfill Expansion, Wentworth LGA

Thank you for your correspondence dated 03 May 2021 received by Heritage NSW (Department of Premier and Cabinet) regarding the above project.

Attached is a list of known Aboriginal parties for the Wentworth local government area that Heritage NSW considers likely to have an interest in the activity. Please note this list is not necessarily an exhaustive list of all interested Aboriginal parties. Receipt of this list does not remove the requirement of a proponent/consultant to advertise in local print media and contact other bodies seeking interested Aboriginal parties, in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for PropONENTS 2010* (April 2010).

Under Section 4.1.6. of the Consultation Requirements, you must also provide a copy of the names of each Aboriginal person who registered an interest to the relevant **Heritage NSW** office and Local Aboriginal Land Council (LALC) within 28 days from the closing date for registering an interest.

Please note that the contact details in the list provided by Heritage NSW may be out of date as it relies on Aboriginal parties advising Heritage NSW when their details need changing. If individuals/companies undertaking consultation are aware that any groups contact details are out of date, or letters are returned unopened, please contact either the relevant stakeholder group (if you know their more current details) and/or Heritage NSW. AHIP applicants should make a note of any group they are unable to contact as part of their consultation record.

If you have any questions about this advice, please email:
heritagemailbox@environment.nsw.gov.au or contact (02) 9873 8500.

Yours sincerely

Dan Clegg
Aboriginal Heritage Planning Support Officer
Aboriginal Heritage Regulation Branch - South
Heritage NSW

Encl: Attachment A: Registered Aboriginal Interests - Wentworth Local Government Area

Attachment A: Registered Aboriginal Interests

Wentworth Local Government Area

Organisation/ Individual Name	Address	Contact Details
Arthur Kirby	Po box: care of Koorlong post office 3501 Phone number: 0438668089 Address: 24 th street Koorlong 3501	0438 668 089
Barkindji Maroura Elders Council	C/- BMEC Coordinator (Pamela Dunrobin) DPI Water 32 Enterprise Way BURONGA NSW 2739	Phone: 03 5021 9430 Email: pamela.dunrobin@dpi.nsw.gov.au
Ms Mary Ann Marton	11 Logan Avenue MILDURA VIC 3500	Phone: 03 5023 7867 Mobile: 0421 808 444
WLRWHA Aboriginal Advisory Group	C/-WLRWHA Executive Officer (Dan Rosendahl) & Aboriginal Projects Coordinator (Leanne Mitchell) NPWS PO Box 318 BURONGA NSW 2739	Dan Rosendahl Phone: 03 5021 8908 Mobile: 0417 204 237 Email: dan.rosendahl@environment.nsw.gov.au Leanne Mitchell Phone: 03 5021 8911 Email: leanne.mitchell@environment.nsw.gov.au
Pappin Family Aboriginal Corporation	2 Alfred Close MILDURA VIC 3500	Mobile: 0400 634 994
Gary Pappin	PO Box 243 BALRANALD NSW 2715	Mobile: 0424 625 636
Wakool Indigenous Corporation	Cynthja Pappin PO Box 243 BALRANALD NSW 2715	Mobile: 0400 634 994 Email: info@wakool.com.au
Barkandji #8 Native Title Determinants	NTSCorp PO Box 2105 STRAWBERRY HILLS NSW 2012	Phone: 02 9310 3188 Email: information@ntscorp.com.au
Ta-Ru Board of Management/Mauraua Barkintji Traditional Owners	14 Euneva Drive MILDURA VIC 3500 Ricky Mitchell (Chair) Rex Smith (Dep Chair)	Phone: 0487 160 808 Email: rickymitchell836@gmail.com

From: **Derek Hardman** barkandjiceo@gmail.com 
Subject: Fwd: Barkandji ACHA Identification of Aboriginal stakeholders Buronga Landfill Expansion
Date: 4 May 2021 at 9:44 am
To: landskape@telstra.com, Pam Handy pam.handy@daretonlalc.com.au, BMEET CEO ceo@bmeet.com.au, akirby@bmeet.com.au, Malcolm King mking@bmeet.com.au



Hi Matt,
the 3 groups that you will need to consult are as follows and Ccd into this email
Barkandji Native title (Myself)
Dareton Local Aboriginal Land Council (Pam Handy)
BMEET (Arthur Kirby)
Thanks
Derek

----- Forwarded message -----

From: **Matilda Vaughan** <mvaughan@ntscorp.com.au>
Date: Tue, May 4, 2021 at 8:43 AM
Subject: Barkandji ACHA Identification of Aboriginal stakeholders Buronga Landfill Expansion
To: warrenbc53@outlook.com <warrenbc53@outlook.com>, geraldjamesquayle26@gmail.com <geraldjamesquayle26@gmail.com>, kevinknight1250@gmail.com <kevinknight1250@gmail.com>, barkandjiceo@gmail.com <barkandjiceo@gmail.com>, bilyara@live.com.au <bilyara@live.com.au>, Leroy Johnson <Leroy.Johnson@environment.nsw.gov.au>, kutjika@hotmail.com <kutjika@hotmail.com>, barkindjiwoman@gmail.com <barkindjiwoman@gmail.com>, potter.kathy.m@edumail.vic.gov.au <potter.kathy.m@edumail.vic.gov.au>
Cc: James MacLeod <jmacLeod@ntscorp.com.au>, Maeve Parker <mparker@ntscorp.com.au>

Dear Barkandji NTGAC,

Please see attached notice for an Aboriginal Cultural Heritage assessment.

Wentworth Shire Council intends to upgrade the municipal landfill at Lot 1 DP1037845, Arumpo Road, Buronga.

Nominations are requested by Monday 17 May 2021 to:

Dr Matt Cupper,
Landscape, 178 Midgen Flat Road Broken Head 2481
landscape@telstra.com
0408 006 690.

Please contact James MacLeod jmacLeod@ntscorp.com.au or Maeve Parker mparker@ntscorp.com.au if you have any questions.

Kind regards,

Tilly

Tilly Vaughan | Law Graduate



**NTSCORP proudly acknowledge that our office is situated on the country
of the Gadigal People of the Dharug Nation. We also acknowledge and
pay our respect to their Elders past and present.**

From: **Ricky Mitchell** rickymitchell836@gmail.com
Subject: Re: Registration of Aboriginal stakeholders Buronga Landfill Expansion
Date: 5 May 2021 at 10:48 am
To: Matt Cupper landskape@telstra.com

RM

Hi Matt.

I would like to express interest on behalf of the Maraura Traditional Owners. I can organise 2 of our senior knowledge holders uncle Rexy Smith and Rodney Mitchell.

Regards

On Wed, 5 May 2021, 10:22 am Matt Cupper, <landskape@telstra.com> wrote:
Dear Ricky,

Trust all is well.

Wentworth Shire Council is planning to apply for an approval under Part 4 Division 4.7 (State Significant Development) of the *Environmental Planning and Assessment Act 1979* to upgrade the municipal landfill at Lot 1 DP1037845, 258 Arumpo Road, Buronga. Works include excavation of new pits, modified internal infrastructure and hardstands and stormwater drainage works. The project area is approximately 5 km north of Buronga, NSW (see Figure 1, attached).

Landscape on behalf of Wentworth Shire Council would like to consult with all Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area. The purpose of the consultation is to assist Wentworth Shire Council in the preparation of an Environmental Impact Statement for the proposal. Any persons or groups who would like to be consulted are invited to contact me: Dr Matt Cupper, Landscape, 178 Midgen Flat Road Broken Head 2481; e-mail: landskape@telstra.com; tel: 0408 006 690.

Closing date for registrations of interest is 5:00 pm Wednesday 19 May 2021.

Many thanks,

Matt

Dr Matt Cupper
Principal
Landscape

Tel: 0408 006 690
landskape@telstra.com

On 3 Feb 2021, at 12:36 pm, Ricky Mitchell <rickymitchell836@gmail.com> wrote:

Hi Matt.

Thanks for your email I can organise uncle Rexy Smith and uncle Rodney Mitchell our 2 senior knowledge holders.

On Wed, 3 Feb 2021, 12:16 pm Matt Cupper, <landskape@telstra.com> wrote:
Dear Ricky,

Trust all is well.

Adrian Ribarits is planning to apply for an approval under Part 5 of the Environmental Planning and Assessment Act 1979 for the installation on an irrigation pumping station and associated rising main at Lot 2 DP1035269, 6175 Sturt Highway, Trentham Cliffs (see Figure 1, attached).

Landscape on behalf of Adrian Ribarits would like to consult with all Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area. The purpose of the consultation is to assist Adrian Ribarits in the preparation of an application for an Aboriginal Heritage Impact Permit and to assist Heritage NSW in its consideration and determination of the application. Any persons or groups who would like to be consulted are invited to contact me: Dr Matt Cupper, Landscape, 178 Midgen Flat Road Broken Head 2481; e-mail: landskape@telstra.com; tel: 0408 006 690.

Closing date for registrations of interest is 5:00 pm Friday 19 February 2021.

Many thanks,

Matt

From: Maeve Parker mparker@ntscorp.com.au 
Subject: FW: Barkandji ACHA Identification of Aboriginal stakeholders Buronga Landfill Expansion
Date: 6 May 2021 at 10:43 am
To: landskape@telstra.com
Cc: James MacLeod jmacLeod@ntscorp.com.au, Matilda Vaughan mvaughan@ntscorp.com.au, Derek Hardman barkandjiceo@gmail.com



Dear Matt,

Could you please note Barkandji Native Title Group Aboriginal Corporation RTNBC (ICN 4740) (**Barkandji Corporation**) as a RAP for the project.

Very best,

Maeve Rose Parker | Solicitor



NTSCORP proudly acknowledge that our office is situated on the country of the Gadigal People of the Dharug Nation.

We also acknowledge and pay our respect to their Elders past and present.

t 02 8306 2708 | **m** 0457 855 690 | **f** 02 9310 4177 | Free call: 1800 111 844

e mparker@ntscorp.com.au | **w** www.ntscorp.com.au

Level 1, 44-70 Rosehill Street, Redfern, NSW 2016 Australia

NTSCORP is committed to supporting local Aboriginal businesses where possible through the purchase of goods and services.

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Please consider the environment before printing this email

From: Matt Cupper [<mailto:landskape@telstra.com>]
Sent: Monday, May 3, 2021 2:51 PM
To: George Tonna
Subject: Identification of Aboriginal stakeholders Buronga Landfill Expansion

Dear George,

Wentworth Shire Council intends to upgrade the municipal landfill at Lot 1 DP1037845, Arumpo Road, Buronga. Works include excavation of new pits, modified internal infrastructure and hardstands and stormwater drainage works. The project area is approximately 5 km north of Buronga, NSW (see Figure 1, attached).

Landskape on behalf of Wentworth Shire Council would like to consult with all Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area. Could NTSCorp provide contact details of any known Aboriginal groups or individuals who may hold cultural knowledge relevant to the proposed project area, please?

I would appreciate if you could provide any information regarding Aboriginal stakeholders by 5 pm Monday 17 May 2021 to me: Dr Matt Cupper, Landskape, 178 Midgen Flat Road Broken Head 2481; e-mail: landskape@telstra.com; tel: 0408 006 690.

From: James MacLeod jmacLeod@ntscorp.com.au 
Subject: FW: Barkandji ACHA Identification of Aboriginal stakeholders Buronga Landfill Expansion
Date: 25 May 2021 at 5:19 pm
To: landskape@telstra.com
Cc: Maeve Parker mparker@ntscorp.com.au

JM

Dear Matt

Please register Barkandji Native Title Group Aboriginal Corporation RNTBC (ICN 4740) as a RAP for this project

Kind regards

James

James MacLeod | Senior Solicitor



NTSCORP proudly acknowledge that our office is situated on the country of the Gadigal People of the Dharug Nation. We also acknowledge and pay our respect to their Elders past and present.

t 02 9310 3188 | **f** 02 9310 4177

d 02 8306 2735 | **m** 0498 980 212

e jmacleod@ntscorp.com.au | **w** www.ntscorp.com.au

Level 1, 44-70 Rosehill Street, Redfern, NSW 2016 Australia

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Please consider the environment before printing this email

From: Matt Cupper [<mailto:landskape@telstra.com>]

Sent: Monday, May 3, 2021 2:51 PM

To: George Tonna

Subject: Identification of Aboriginal stakeholders Buronga Landfill Expansion

Dear George,

Wentworth Shire Council intends to upgrade the municipal landfill at Lot 1 DP1037845, Arumpo Road, Buronga. Works include excavation of new pits, modified internal infrastructure and hardstands and stormwater drainage works. The project area is approximately 5 km north of Buronga, NSW (see Figure 1, attached).

Landskape on behalf of Wentworth Shire Council would like to consult with all Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area. Could NTSCorp provide contact details of any known Aboriginal groups or individuals who may hold cultural knowledge relevant to the proposed project area, please?

I would appreciate if you could provide any information regarding Aboriginal stakeholders by 5 pm Monday 17 May 2021 to me: Dr Matt Cupper, Landskape, 178 Midgen Flat Road Broken Head 2481; e-mail: landskape@telstra.com; tel: 0408 006 690.

Many thanks,

Matt

Dr Matt Cupper
Principal
Landskape



Dear Matt

In relation to your email received 3 May 2021, seeking the names of Aboriginal people who may be able to provide cultural heritage values / places within the project area, please see the table below.

I don't have any individual names but would envisage the contact groups below would provide this.

Group	Contact	Email	Phone
Far West Aboriginal Land Council - Dareton	Pam Handy - CEO	pam.handy@daretonlalc.com.au	03 5027 4721
Barkandji Prescribed Body Corporate - Broken Hill	Derek Hardman - CEO	barkandjiRNTBC@gmail.com	0437 832 620
Barkindji Maraura Elders Environment Team (BMEET) - Dareton	John Winch (a contact that I know)	admin@bmeet.com.au jwinch@bmeet.com.au	03 5027 4073

Lot 212 DP756946 – Reserve 86496 & Lot 197 Reserve 97154 are listed in schedule 5 Extinguished Areas of the Barkandji consent determination, see the attached diagram.

If you require any additional information, please contact me on the details below.

Kind regards
Hilary

Hilary Dye
Property & Land Tenure Officer

**WENTWORTH
SHIRE COUNCIL**

26-28 Adelaide Street | PO Box 81 WENTWORTH NSW 2648

P 03 5027 5027 | E hilary.dye@wentworth.nsw.gov.au

W: www.wentworth.nsw.gov.au

Our values: Honesty and Integrity | Accountability and Transparency | Respect | Quality | Commitment



APPENDIX 5. AHIMS REGISTER SEARCH



SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
46-3-0079	Gol Gol Lake Midden;	AGD	54	613350	6222950	Open site	Valid	Burial : -	Burial/s	
Contact										
46-3-0083	Burial;	AGD	54	595980	6231740	Open site	Valid	Burial : -	Burial/s	
Contact										
46-3-0003	Merbein;River Road Buronga;	AGD	54	604195	6221378	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	884
Contact										
46-3-0004	Merbein;River Road Buronga;	AGD	54	605109	6221378	Open site	Valid	Artefact : -, Burial : -	Burial/s,Open Camp Site	884
Contact										
46-3-0005	Merbein;River Road Buronga;	AGD	54	605109	6221378	Open site	Valid	Ceremonial Ring (Stone or Earth) : -	Bora/Ceremonial	884
Contact										
46-3-0006	Gol Gol Lake;	AGD	54	614249	6224120	Open site	Valid	Modified Tree (Carved or Scarred) : -	Carved Tree	484
Contact										
46-2-0078	Wentworth Level 2;East Wentworth;	AGD	54	584960	6226730	Open site	Valid	Artefact : -	Open Camp Site	4516
Contact										
46-2-0079	Wentworth Level 3;East Wentworth;	AGD	54	585230	6226730	Open site	Valid	Artefact : -	Isolated Find	4516
Contact										
46-2-0080	Wentworth Level 1;East Wentworth;	AGD	54	585020	6226820	Open site	Valid	Artefact : -	Open Camp Site	4516
Contact										
46-2-0081	Wentworth Level 5;East Wentworth;	AGD	54	585050	6226630	Open site	Valid	Hearth : 2	Mound (Oven)	4516
Contact										
46-2-0082	Wentworth Level 6;East Wentworth;	AGD	54	585300	6225940	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	4516
Contact										
46-2-0083	Wentworth Level 7;South Wentworth;	AGD	54	585300	6225940	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	4516
Contact										
46-2-0084	Wentworth Level 4;East Wentworth;	AGD	54	585560	6226810	Open site	Valid	Artefact : -	Isolated Find	4516
Contact										
46-2-0085	Wentworth Level 8	AGD	54	585000	6225500	Open site	Valid	Artefact : -	Open Camp Site	4516
Contact										

Report generated by AHIMS Web Service on 04/07/2021 for Matt Cupper for the following area at Datum :GDA, Zone : 54, Eastings : 585000 - 615000, Northings : 6222000 - 6232000 with a Buffer of 1000 meters. Additional Info : Identify previously recorded Aboriginal cultural heritage sites in the study area. Number of Aboriginal sites and Aboriginal objects found is 114

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
46-2-0096	Tuckers creek	AGD	54	588100	6228680	Open site	Valid	Burial : -		
Contact										
Recorders Randelle Blair										
46-2-0097	wentworth rifle range	AGD	54	585796	6226710	Open site	Valid	Burial : -		
Contact										
Recorders Randelle Blair										
46-2-0098	tuckers creek-wentworth	AGD	54	588100	6228680	Open site	Valid	Burial : -		
Contact										
Recorders Randelle Blair										
46-3-0087	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid			
Contact Randelle Blair										
Recorders Randelle Blair										
46-3-0119	Murndi Scarred Tree 1	GDA	54	595431	6223243	Open site	Valid	Modified Tree (Carved or Scarred) : -		
Contact										
Recorders ERM Australia Pty Ltd- Sydney CBD										
46-3-0120	Murndi Scarred Tree 2	GDA	54	595539	6223178	Open site	Valid	Modified Tree (Carved or Scarred) : -		
Contact										
Recorders ERM Australia Pty Ltd- Sydney CBD										
46-3-0121	Murndi Scarred Tree 3	GDA	54	595914	6223200	Open site	Valid	Modified Tree (Carved or Scarred) : -		
Contact										
Recorders ERM Australia Pty Ltd- Sydney CBD										
46-3-0122	Murndi Shell Midden	GDA	54	596013	6223244	Open site	Valid	Modified Tree (Carved or Scarred) : -		
Contact										
Recorders ERM Australia Pty Ltd- Sydney CBD										
46-2-0144	Wentworth Rifle Range	AGD	54	585780	6226705	Open site	Valid	Burial : -		
Contact										
Recorders Randelle Blair										
46-3-0124	Gol Gol Inlet Creek fireplace	GDA	54	613740	6221290	Open site	Valid	Hearth : 3		
Contact										
Recorders Harvey Johnston										
46-2-0312	Kelso Station Scarred Tree 4	GDA	54	585746	6229562	Open site	Valid	Modified Tree (Carved or Scarred) : -		
Contact										
Recorders Everick Heritage Pty Ltd,Ms.Caitlin Marsh										
46-2-0313	Kelso Station Scarred Tree 1	GDA	54	585769	6229622	Open site	Valid	Modified Tree (Carved or Scarred) : -		
Contact										
Recorders Everick Heritage Pty Ltd,Ms.Caitlin Marsh										
46-2-0314	Kelso Station Artefact Scatter 2	GDA	54	586085	6229774	Open site	Valid	Artefact : -		

Report generated by AHIMS Web Service on 04/07/2021 for Matt Cupper for the following area at Datum :GDA, Zone : 54, Eastings : 585000 - 615000, Northings : 6222000 - 6232000 with a Buffer of 1000 meters. Additional Info : Identify previously recorded Aboriginal cultural heritage sites in the study area. Number of Aboriginal sites and Aboriginal objects found is 114

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	<u>Contact</u>							<u>Permits</u>		
46-2-0310	Kelso Station Scarred Tree 3	Recorders								
		GDA	54	585668	6229562	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>							<u>Permits</u>		
46-2-0311	Kelso Station Scarred Tree 2	Recorders								
		GDA	54	585481	6229390	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>							<u>Permits</u>		
50-2-0052	Kelso Station Artefact Scatter 1	Recorders								
		GDA	54	585732	6229594	Open site	Valid	Artefact : -		
	<u>Contact</u>							<u>Permits</u>		
46-2-0018	Tuckers Creek 2;	Recorders								
		AGD	54	588100	6228700	Open site	Valid	Artefact : -, Shell : -	Midden,Open Camp Site	2136
	<u>Contact</u>							<u>Permits</u>		
46-3-0014	Fletchers Lake Burial 1;	Recorders								
		AGD	54	596000	6231800	Open site	Valid	Burial : -, Artefact : -	Burial/s,Open Camp Site	1216,1363
	<u>Contact</u>							<u>Permits</u>		
46-3-0015	Fletchers Lake;	Recorders								
		AGD	54	595000	6232000	Open site	Valid	Burial : -	Burial/s	
	<u>Contact</u>							<u>Permits</u>		
46-3-0031	Golf Club Midden;	Recorders								
		AGD	54	595000	6225900	Open site	Valid	Shell : -, Artefact : -	Midden	
	<u>Contact</u>							<u>Permits</u>		
46-3-0001	Merbein;River Road Buronga;	Recorders								
		AGD	54	603281	6221378	Open site	Valid	Shell : -, Artefact : -	Midden	1586
	<u>Contact</u>							<u>Permits</u>		
46-2-0003	Daretton;Tuckers Creek;	Recorders								
		AGD	54	588900	6228800	Open site	Valid	Burial : -	Burial/s	2136
	<u>Contact</u>							<u>Permits</u>		
46-2-0010	Wentworth Hospital 2	Recorders								
		AGD	54	585100	6224900	Open site	Valid	Artefact : -, Shell : -	Midden,Open Camp Site	1044
	<u>Contact</u>							<u>Permits</u>		
46-2-0011	Wentworth Hospital 3	Recorders								
		AGD	54	584900	6224900	Open site	Valid	Artefact : -, Shell : -	Midden,Open Camp Site	1044
	<u>Contact</u>							<u>Permits</u>		
46-2-0012	Wentworth Hospital 1	Recorders								
		AGD	54	584800	6224900	Open site	Valid	Artefact : -, Shell : -	Midden,Open Camp Site	1044
	<u>Contact</u>							<u>Permits</u>		
46-2-0013	Wentworth	Recorders								
		AGD	54	585001	6224120	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	
	<u>Contact</u>							<u>Permits</u>		
		Recorders								
		K Williams								

Report generated by AHIMS Web Service on 04/07/2021 for Matt Cupper for the following area at Datum :GDA, Zone : 54, Eastings : 585000 - 615000, Northings : 6222000 - 6232000 with a Buffer of 1000 meters. Additional Info : Identify previously recorded Aboriginal cultural heritage sites in the study area. Number of Aboriginal sites and Aboriginal objects found is 114

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
46-2-0014	Wentworth	AGD	54	585915	6223206	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	1044
Contact										
46-2-0015	Wentworth Hostpital 2	AGD	54	585100	6224960	Open site	Valid	Artefact : - , Shell : -	Midden,Open Camp Site	1044
Contact										
46-2-0016	Wentworth Hostpital 3	AGD	54	584900	6224940	Open site	Valid	Artefact : - , Shell : -	Midden,Open Camp Site	1044
Contact										
46-2-0017	Wentworth Hostpital 1	AGD	54	584885	6224950	Open site	Valid	Artefact : - , Shell : -	Midden,Open Camp Site	1044
Contact										
46-3-0109	BURONGA HILL 01	GDA	54	605545	6223451	Open site	Valid	Modified Tree (Carved or Scarred) : -		
Contact										
46-3-0114	Gol Gol Lake Craib site 62	GDA	54	614135	6221689	Open site	Valid	Shell : 1		101271
Contact										
46-3-0134	Fletchers Lake 006 (FL006)	GDA	54	596964	6232983	Open site	Valid	Artefact : 1		
Contact										
46-3-0135	Fletchers Lake 007 (FL007)	GDA	54	596967	6232980	Open site	Valid	Artefact : 1		
Contact										
46-3-0136	Fletchers Lake 008 (FL008)	GDA	54	596954	6232884	Open site	Valid	Artefact : 1		
Contact										
46-3-0137	Fletchers Lake 010 (FL010)	GDA	54	596921	6232822	Open site	Valid	Artefact : 1		
Contact										
46-3-0138	Fletchers Lake 011 (FL011)	GDA	54	596916	6232834	Open site	Valid	Shell : 1		
Contact										
46-3-0143	Fletchers Lake 044 (FL044)	GDA	54	596777	6232801	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
Contact										
46-3-0144	Fletchers Lake 043 (FL043)	GDA	54	596739	6232731	Open site	Valid	Artefact : 1		
Contact										
46-3-0149	Fletchers Lake 018 (FL018)	GDA	54	596762	6232932	Open site	Valid	Modified Tree (Carved or Scarred) : 1		

Report generated by AHIMS Web Service on 04/07/2021 for Matt Cupper for the following area at Datum :GDA, Zone : 54, Eastings : 585000 - 615000, Northings : 6222000 - 6232000 with a Buffer of 1000 meters. Additional Info : Identify previously recorded Aboriginal cultural heritage sites in the study area. Number of Aboriginal sites and Aboriginal objects found is 114

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	<u>Contact</u>									<u>Permits</u>
46-3-0156	Fletchers Lake 025 (FL025)	Recorders	Ms.Sarah Watts							
		GDA	54	596561	6232837	Open site	Valid	Artifact : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0157	Fletchers Lake 026 (FL026)	Recorders	Ms.Sarah Watts							
		GDA	54	596549	6232767	Open site	Valid	Artifact : 1, Shell : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0158	Fletchers Lake 027 (FL027)	Recorders	Ms.Sarah Watts							
		GDA	54	596539	6232742	Open site	Valid	Artifact : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0159	Fletchers Lake 028 (FL028)	Recorders	Ms.Sarah Watts							
		GDA	54	596538	6232737	Open site	Valid	Artifact : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0160	Fletchers Lake 029 (FL029)	Recorders	Ms.Sarah Watts							
		GDA	54	596528	6232738	Open site	Valid	Artifact : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0161	Fletchers Lake 030 (FL030)	Recorders	Ms.Sarah Watts							
		GDA	54	596520	6232694	Open site	Valid	Artifact : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0162	Fletchers Lake 031 (FL031)	Recorders	Ms.Sarah Watts							
		GDA	54	596520	6232687	Open site	Valid	Artifact : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0166	Fletchers Lake 035 (FL035)	Recorders	Ms.Sarah Watts							
		GDA	54	596788	6232495	Open site	Valid	Artifact : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0167	Fletchers Lake 036 (FL036)	Recorders	Ms.Sarah Watts							
		GDA	54	596869	6232557	Open site	Valid	Artifact : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0168	Fletchers Lake 037 (FL037)	Recorders	Ms.Sarah Watts							
		GDA	54	596882	6232616	Open site	Valid	Artifact : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0169	Fletchers Lake 038 (FL038)	Recorders	Ms.Sarah Watts							
		GDA	54	596902	6232732	Open site	Valid	Artifact : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0170	Fletchers Lake 039 (FL039)	Recorders	Ms.Sarah Watts							
		GDA	54	596896	6232746	Open site	Valid	Shell : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0171	Fletchers Lake 040 (FL040)	Recorders	Ms.Sarah Watts							
		GDA	54	596814	6232377	Open site	Valid	Artifact : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0172	Fletchers Lake 041 (FL041)	Recorders	Ms.Sarah Watts							
		GDA	54	596719	6232564	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0173	Fletchers Lake 042 (FL042)	Recorders	Ms.Sarah Watts							
		GDA	54	596721	6232687	Open site	Valid	Artifact : 1		
	<u>Contact</u>									<u>Permits</u>
46-3-0127	Buronga Botanical Gardens Burial 1	Recorders	Harvey Johnston							
	<u>Contact</u>									<u>Permits</u>

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
46-3-0128	Buronga Botanical Gardens Burial 2	GDA	54	606142	6221149	Open site	Valid	Burial : 1		
Contact										
46-3-0196	Daretton Midden	GDA	54	595955	6226323	Open site	Valid	Shell : -		
Contact										
46-2-0306	MBHP AFT 79	GDA	54	584541	6228107	Open site	Partially Destroyed	Artefact : -		
Contact										
46-2-0307	Smyth Street Midden	GDA	54	584828	6226586	Open site	Valid	Shell : -		
Contact										
46-2-0300	MBHP AFT HTH SHL 04	GDA	54	584623	6227471	Open site	Partially Destroyed	Artefact : -, Hearth : -, Shell : -		
Contact										
46-2-0302	GHD SM 02	GDA	54	585743	6225716	Open site	Partially Destroyed	Artefact : -, Hearth : -, Shell : -		
Contact										
46-2-0303	GHD SM 01	GDA	54	585810	6225595	Open site	Partially Destroyed	Hearth : -, Shell : -		
Contact										
46-2-0308	Kelso Midden	GDA	54	586037	6228924	Open site	Valid	Artefact : -, Shell : -		
Contact										
46-2-0305	GHD SM 04	GDA	54	584201	6227521	Open site	Valid	Shell : -		
Contact										
50-3-0055	Red Hill Midden 01	GDA	54	594179	6227201	Open site	Valid	Artefact : -, Shell : -		104400
Contact										
46-2-0332	Willow Bend CP 2	GDA	54	584646	6225049	Open site	Valid	Modified Tree (Carved or Scarred) : -		
Contact										
46-2-0333	Willow Bend CP 1	GDA	54	584640	6225035	Open site	Valid	Artefact : -		
Contact										
46-2-0092	East Wentworth 2	AGD	54	586710	6228680	Open site	Valid	Artefact : -	Open Camp Site	
Contact										
46-2-0093	East Wentworth 1	AGD	54	586980	6228590	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	
Contact										
46-2-0095	WENTWORTH LEVEL 9	AGD	54	586350	6227320	Open site	Valid	Artefact : -		97372

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	<u>Contact</u>							<u>Permits</u>		
46-3-0086	TAPIO 1	AGD	54	610680	6232110	Open site	Valid	Artefact : -		
	<u>Contact</u>							<u>Permits</u>		
46-3-0084	DARETON CAMPSITE 1	AGD	54	593720	6230120	Open site	Valid	Shell : -		
	<u>Contact</u>							<u>Permits</u>		
46-3-0092	Buronga Loam Pit 1	GDA	54	611120	6223910	Open site	Valid	Artefact : 1		
	<u>Contact</u>	Searle						<u>Permits</u>	2495	
46-3-0093	Buronga Loam Pit 2	GDA	54	611900	6223670	Open site	Valid	Artefact : 1		
	<u>Contact</u>	Searle						<u>Permits</u>	2495	
46-3-0103	KB 11	GDA	54	597839	6232328	Open site	Valid	Hearth : 1		
	<u>Contact</u>	Mr.John Gilding						<u>Permits</u>		
46-3-0104	KB 12	GDA	54	597746	6232226	Open site	Valid	Artefact : 2		
	<u>Contact</u>	Mr.John Gilding						<u>Permits</u>		
46-3-0105	KB 13	GDA	54	597582	6232005	Open site	Valid	Artefact : 30		
	<u>Contact</u>	Mr.John Gilding						<u>Permits</u>		
46-3-0106	KB 14	GDA	54	597630	6232060	Open site	Valid	Artefact : 2		
	<u>Contact</u>	Mr.John Gilding						<u>Permits</u>		
46-3-0097	KB 5	GDA	54	601168	6222667	Open site	Valid	Artefact : 11		
	<u>Contact</u>	Mr.John Gilding						<u>Permits</u>		
46-3-0100	KB 8	GDA	54	602658	6222297	Open site	Valid	Artefact : 1		
	<u>Contact</u>	Mr.John Gilding						<u>Permits</u>		
46-3-0101	KB 9	GDA	54	597923	6232550	Open site	Valid	Artefact : 1		
	<u>Contact</u>	Mr.John Gilding						<u>Permits</u>		
46-3-0094	CSIRO Farm 1	GDA	54	598540	6223300	Open site	Valid	Hearth : -, Shell : -		
	<u>Contact</u>	Kate Sefton						<u>Permits</u>		
46-3-0095	KB1	AGD	54	606718	6223935	Open site	Valid	Artefact : -		
	<u>Contact</u>							<u>Permits</u>		
46-3-0102	KB 10	GDA	54	597933	6232491	Open site	Valid	Artefact : 1		
	<u>Contact</u>	Mr.John Gilding						<u>Permits</u>		
46-3-0091	Dareton Boat Ramp Midden	GDA	54	595662	6226500	Open site	Valid	Earth Mound : -, Shell : -		104147,104148
	<u>Contact</u>	T Russell						<u>Permits</u>	4031,4109,4287	
46-3-0107	KB 2	GDA	54	603522	6231829	Open site	Valid	Artefact : 1		
	<u>Contact</u>	Sarah Colley						<u>Permits</u>		
46-3-0096	KB 4	GDA	54	602139	6222531	Open site	Valid	Hearth : 1		

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
46-3-0098	KB 6	<u>Contact</u> Mr.John Gilding	<u>Recorders</u> Mr.John Gilding	GDA	54 601859	6222959	Open site	Valid	Hearth : 2	<u>Permits</u>
46-3-0099	KB 7	<u>Contact</u> Mr.John Gilding	<u>Recorders</u> Mr.John Gilding	GDA	54 602635	6222271	Open site	Valid	Artefact : 1	<u>Permits</u>
46-3-0116	Gol Gol Lake Midden 4	<u>Contact</u> Mr.John Gilding	<u>Recorders</u> Mr.John Gilding	GDA	54 612550	6222700	Open site	Valid	Artefact : 6, Hearth : 1, Shell : -	101633
46-3-0117	Gol Gol Lake Midden 3	<u>Contact</u>	<u>Recorders</u> Doctor.Matt Cupper	GDA	54 612800	6221450	Open site	Valid	Shell : -	101633
46-3-0118	Gol Gol Lake Midden 2	<u>Contact</u>	<u>Recorders</u> Doctor.Matt Cupper	GDA	54 613755	6224500	Open site	Valid	Shell : -	101633
46-3-0178	Dareton Bmx Area (Burials)	<u>Contact</u>	<u>Recorders</u> Randelle Blair	GDA	54 593974	6226450	Open site	Valid	Burial : 3, Shell : -, Artefact : -	<u>Permits</u>
46-2-0295	Long Term Water Pipeline Hearth Shell 118	<u>Contact</u>	<u>Recorders</u> Niche Environment and Heritage,Mr.Samuel Richards	GDA	54 584023	6225468	Open site	Valid	Hearth : -, Shell : -	<u>Permits</u>
46-2-0291	Long Term Water Pipeline Hearth 120	<u>Contact</u>	<u>Recorders</u> Niche Environment and Heritage,Mr.Samuel Richards	GDA	54 585146	6224991	Open site	Valid	Hearth : -	4174
46-3-0192	Buronga Landfill Artefact Scatter 1	<u>Contact</u>	<u>Recorders</u> Ms.Sarah Watts	GDA	54 610565	6223164	Open site	Valid	Artefact : -	<u>Permits</u>
46-3-0195	dareton golf club midden	<u>Contact</u>	<u>Recorders</u> Ms.Leanne Mitchell,office of environment and heritage - national parks and wildlife	GDA	54 594950	6225846	Open site	Valid	Aboriginal Resource and Gathering : -, Hearth : -, Shell : -	4081
46-3-0194	RIVER ROAD - MILDURA	<u>Contact</u>	<u>Recorders</u> Randelle Blair,Office of Environment & Heritage	GDA	54 602793	6221907	Open site	Valid	Non-Human Bone and Organic Material : 1, Shell : 1	<u>Permits</u>
46-3-0202	PEC-W-114	<u>Contact</u>	<u>Recorders</u> Navin Officer Heritage Consultants Pty Ltd,Mr.Adrian Cressey	GDA	54 610792	6232304	Open site	Valid	Artefact : -	<u>Permits</u>

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