

Brookvale Community Health Centre: Historic Heritage Impact Assessment and Preliminary Aboriginal Heritage Assessment

Prepared by Australian Museum Consulting
For Johnstaff

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Executive Summary

Australian Museum Consulting has been commissioned by Johnstaff, on behalf of Health Infrastructure, to prepare a Historic Heritage Impact Assessment and a Preliminary Aboriginal Heritage Assessment for the proposed works relating to the Brookvale Community Health Centre Project. The project is currently being assessed as a State Significant Development under Part 4 Division 4.1 of the *Environmental Planning & Assessment Act 1979*. The Historic Heritage Impact Assessment and Preliminary Aboriginal Heritage Assessment will form part of the Environmental Impact Assessment (EIS) prepared by SMEC Australia Pty Ltd for Health Infrastructure. This document has been prepared to address the relevant Secretary's Environmental Assessment Requirements (SEARs) for the project. The project includes construction of a multi-story community health centre with an associated six-story, above ground, parking facility at 612, 620 and 624 Pittwater Road.

The site comprises three properties;

- 612 Pittwater Road –cleared land formerly occupied by a service station. The site has since been remediated.
- 620 Pittwater Road – occupied by a semi-derelict brick house and a number of smaller out buildings.
- 624 Pittwater Road –occupied by two commercial enterprises with an associated car parking area.

The background review and physical analysis identified no heritage constraints associated with Aboriginal cultural heritage. The results of the site inspection confirmed extensive disturbance from residential and commercial development and it is therefore considered highly unlikely that evidence of previous activities by Aboriginal people would be present within the study area.

No historic heritage constraints have been identified associated with 612 and 624 Pittwater Road. However, there is potential for archaeological remains to be present in the 620 Pittwater Road property associated with the home of the first family to purchase land in the Brookvale area, possibly as early as 1838. Despite later disturbances due to the widening of Pittwater Road and construction of a house after 1943, there is potential for physical evidence associated with the Parker family home and associated archaeological features to be extant in the property.

The potential archaeological remains should be appropriately managed in accordance with the Archaeological Management Strategy outlined in Section 7.3 of this report.

Contents

1	Introduction	1
1.1	Background.....	1
1.2	The Site & Proposal.....	1
1.3	Methodology.....	3
1.4	Limitations.....	3
1.5	Authorship and Acknowledgements	4
2	Statutory Context.....	5
2.1	Environment Protection and Biodiversity Conservation Act 1999 (Cth)	5
2.2	Environmental Planning and Assessment Act 1979	5
2.2.1	<i>Warringah Local Environmental Plan 2011</i>	6
2.3	National Parks and Wildlife Act 1974.....	6
2.3.1	<i>Aboriginal Heritage Information Management System (AHIMS)</i>	7
2.4	Heritage Act 1977.....	7
3	Environmental Context.....	9
3.1	Geology and Topography.....	9
3.2	Soils and Disturbance.....	9
3.3	Hydrology and Drainage.....	10
4	Aboriginal Heritage Context	11
4.1	Historical & Ethnographic Context	12
4.2	Regional Archaeological Context.....	12
4.3	Local Archaeological Context.....	12
4.3.1	<i>Previous Archaeological Investigations</i>	12
4.3.2	<i>Registered Aboriginal Sites</i>	13
4.4	Aboriginal Heritage Site Prediction Modelling	15
5	Historic Context.....	17
5.1	Early Land Grants.....	17
5.2	Sub Division.....	17
5.3	Twentieth Century Urbanisation	20
6	Physical Assessment.....	23
6.1	Discussion.....	26
7	Conclusion.....	27
7.1	Aboriginal Heritage.....	27
7.2	Historic Heritage	27
7.3	Archaeological Management Strategy	28
	Bibliography	29
	Appendix A.....	31
	<i>Aboriginal Sites recorded within 5.5x6km of the study area</i>	31

Tables

Table 4.1	Description of Aboriginal site features (after OEH 2012:8-10).....	11
Table 4.2	Summary of Previous Local Aboriginal Heritage Investigations.....	12
Table 4.3	Summary of Aboriginal sites previously recorded near the study area.	13

Figures

Figure 1.1	Location of the study area with the approximate footprint of the footbridge tower indicated in red.....	2
Figure 3.1	Map showing the study area in relation to the surrounding soil landscape groups.	10
Figure 4.1	Location of Aboriginal sites previously recorded near the study area.....	14

Figure 5.1 Detail from Sheet No.5 Parish of Manly Cove, County of Cumberland (1922). The approximate location of the study area is outlined in red.....	17
Figure 5.2 Detail from 1884 sales lithograph advertising property at Greendale Manly for auctioneers Watkin and Watkin. The study area is within the approximate area outlined in red (http://acms.sl.nsw.gov.au/album/ItemViewer.aspx?itemid=1291971&suppress=N&imgindex=2).	18
Figure 5.3 Sketch plan attached to the 1894 Certificate of Title Register Book Vol. 1117 Folio 187. The approximate location of the study area is outlined in red, the western boundary of which approximates the present alignment of Pittwater Road. The approximate modern route of William Street is shown by the dashed blue line.	19
Figure 5.4 Sketch plan detail of the 1943 Certificate of Title, Register Book Vol.3458 Folio 55 with the parts of Lots 4,5,6 and 7, now 612 Pittwater Road, identified in pink for resumption for the road widening.....	20
Figure 5.5 1943 Aerial Imagery of the study area (outlined in red) The yellow line represents the portion of the original property resumed for the Pittwater Road widening in 1948. <i>Brookvale House</i> is visible on the far left of the image. (http://maps.six.nsw.gov.au/).....	21
Figure 5.6 Current aerial of the site with a later house on 620 Pittwater Road (DP 500541). (http://maps.six.nsw.gov.au/).....	21
Figure 6.1 View south-west, from near the boundary between 612 & 620 Pittwater Road, showing the remains of the concrete forecourt of the service station, areas of disturbance caused by remediation activities , the storage of some building materials and partial regrowth of grass and weeds in patches.	23
Figure 6.2 View north-west of the house at 620 Pittwater Road. The south wall of Barbeques Galore at 624 Pittwater Road is visible to the right of the house.....	24
Figure 6.3 View north-west. The pedestrian bridge tower will be located in approximately the area of the red circle.....	24
Figure 6.4 View south-east of the commercial/ warehouse building at 624 Pittwater Road. The darker macadam on the left of the photograph represents the access road to 626 Pittwater Road and the Northern extent of the study area.....	25
Figure 6.5 View south of the warehouses at the rear of 624 Pittwater Road. The shape of the concrete area in the foreground suggests sub surface services have been installed there.....	26

1 Introduction

1.1 Background

Australian Museum Consulting (AM Consulting) has been commissioned by Johnstaff, on behalf of Health Infrastructure, to prepare a Historic Heritage Impact Assessment (HIA) and a Preliminary Aboriginal Heritage Assessment for the proposed works relating to the Brookvale Community Health Centre Project (Brookvale CHC). The project is currently being assessed as a State Significant Development under Part 4 Division 4.1 of the *Environmental Planning & Assessment Act 1979*. The HIA and Preliminary Aboriginal Heritage Assessment will form part of the Environmental Impact Assessment (EIS) prepared by SMEC Australia Pty Ltd for Health Infrastructure. This document has been prepared to address the relevant Secretary's Environmental Assessment Requirements (SEARs) for the project.

1.2 The Site & Proposal

The site of the proposed Brookvale Community Health Centre is at 612-624 Pittwater Road, Brookvale within the Warringah Local Government Area (LGA) and approximately 13km to the north of the Sydney CBD (Figure 1.1).

The study area is located on the north-west corner of the Pittwater Road and William Street intersection and comprises three parcels of land:

- 612 Pittwater Road –cleared land formerly occupied by a service station. The site has since been remediated.
- 620 Pittwater Road – occupied by a semi-derelict brick house and a number of smaller out buildings.
- 624 Pittwater Road –occupied by two commercial enterprises with an associated car parking area.

The Community Health Centre on Pittwater Road is to include an above-ground six level car park with parking for approximately 400 vehicles, subject to final design. Scope of works includes demolition of all structures and the construction of on-site detention/flood storage in the south east part of the study area which will involve the excavation of at least 155m³ of material. Subject to final design, a footbridge would be constructed to carry pedestrians over Pittwater Road from the Health Centre, at the 620 Pittwater Road portion, to terminate at a tower, with lifts and a staircase, on the western side of the road near to the Westfield / Warringah Mall bus stop.



Figure 1.1 Location of the study area with the approximate footprint of the footbridge tower indicated in red.

1.3 Methodology

This report has been prepared in accordance with the principles of the *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 2013* (Burra Charter).

The historic and preliminary Aboriginal heritage assessments are based on the following general methodology:

- Review of statutory and non-statutory heritage lists and registers, to identify the location and significance of Aboriginal and historic heritage items, places, and archaeological sites in the vicinity of the Study Area:
 - National Heritage List (NHL);
 - Commonwealth Heritage List (CHL);
 - State Heritage Register (SHR);
 - State Heritage Inventory (SHI);
 - Aboriginal Heritage Information Management System (AHIMS), Office of Environment and Heritage (OEH);
 - *Warringah Local Environmental Plan 2011*;
 - Historic Heritage Information Management System (HHIMS), OEH;
 - National Trust of Australia (NSW) Register; and
 - Register of the National Estate (RNE).
- Desktop assessment of the environmental context and previous land use history of the Study Area;
- Preparation of a history of the study area, based on a review of relevant primary and secondary historical documentation, maps and photographs;
- Site inspection of the study area and analysis, to assess the current condition of the study area, and to identify any Aboriginal heritage sites or areas of archaeological sensitivity
- Review of cultural heritage values (or heritage significance);
- Assessment of the impacts of the proposed development on the cultural heritage values of items, places and archaeological sites.

The preliminary Aboriginal heritage assessment has been undertaken in accordance with Step 1 of the *Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (Department of Environment and Conservation [DEC] 2005).

The historic heritage impact assessment has been prepared in accordance with the *NSW Heritage Manual* (1996), published by the Heritage Office and Department of Urban Affairs and Planning (now the Heritage Branch, OEH), and associated supplementary publications.

An inspection of the site was undertaken on 5 June 2015 by AM Consulting Project Officer, Ronan Mc Eleney. All photographs in this report were taken at that time, unless otherwise indicated. Photographs of the project area were taken using a Fuji finepix HS 20 EXR camera.

1.4 Limitations

The Rates Books held by Warringah Council for the study area, and dating prior to the 1960s, are apparently in a poor condition, incomplete and many are missing, perhaps as a result of a fire. As such those Rates Books that were available were in a poor condition, water damaged and illegible, and some sections were missing.

1.5 Authorship and Acknowledgements

This report has been prepared by AM Consulting Project Officer Ronan Mc Eleney. AM Consulting Project Manager Chris Langeluddecke provided a technical review of the Aboriginal heritage aspects of the report. AM Consulting Senior Project Manager, Jennie Lindbergh, has reviewed the report for quality and consistency.

2 Statutory Context

The conservation and management of heritage items, places, and archaeological sites takes place in accordance with relevant Commonwealth, State or local government legislation. Non-statutory heritage lists and registers, ethical charters, conservation policies, and community attitudes and expectations can also have an impact on the management, use, and development of heritage items. The relevant statutory and non-statutory heritage listings for the study area are identified below.

2.1 Environment Protection and Biodiversity Conservation Act 1999 (Cth)

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a legal framework for the protection and management of places of national environmental significance. The heritage lists addressed by the EPBC Act include the National Heritage List (NHL) and the Commonwealth Heritage List (CHL). The NHL protects places that have outstanding value to the nation. The CHL protects items and places owned or managed by Commonwealth Government agencies. The Australian Government Department of the Environment is responsible for the implementation of policies and programs to protect and conserve the environment, water and heritage and to promote climate action. Approval from the Minister is required for controlled actions which would have a significant impact on items and places included on the NHL or CHL.

There are no items or places in the vicinity of the study area listed on the NHL or CHL.

2.2 Environmental Planning and Assessment Act 1979

The *Environmental Planning & Assessment Act 1979* (EP&A Act) is the main act regulating land use planning and development in NSW. The project is currently being assessed as a State Significant Development under Part 4 Division 4.1 of the EP&A Act.

Applications made under Part 4 Division 4.1 of the EP&A Act are subject to environmental assessment requirements. The Secretary's Environmental Assessment Requirements (SEARs) were issued in accordance with Section 78A (8A) of the Act and Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) on 16 April 2015. The SEARs relating to Historic and Aboriginal Heritage were as follows:

8. Heritage – The EIS shall include a statement of significance and an assessment of any heritage items and/or conservation areas and/or potentially archaeologically significant areas in accordance with the guidelines in the NSW Heritage Manual.

9. Aboriginal Heritage – Where relevant, the EIS shall address Aboriginal Heritage in accordance with the draft guidelines for Aboriginal Cultural heritage Impact Assessment and Community Consultation 2005 and Aboriginal Cultural Heritage Consultation and Requirements for proponents 2010.

Under Section 89J(c) Health Infrastructure would not be required to apply for approvals or excavation permits under the Heritage Act for State Significant Development. However, under Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* the Director General is required to consult with the Heritage Division in the preparation of environmental assessment requirements, and to assess key issues raised by the Heritage Division with respect to the proposed works.

Under Section 89J (d) Health Infrastructure would not be required to apply for an Aboriginal Heritage Impact Permit for State Significant Development. Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* does however require the Director General to consult with OEH in the preparation of environmental assessment requirements, and to assess key issues raised by the OEH with respect to the proposed works.

The EP&A Act controls the making of environmental planning instruments (EPIs). Two types of EPIs can now be made: Local Environmental Plans (LEPs), covering Local Government Areas; and State Environment Planning Policies (SEPPs), covering areas of State or regional planning significance. LEPs commonly identify and have provisions for the protection of local heritage items, archaeological sites, and heritage conservation areas.

2.2.1 Warringah Local Environmental Plan 2011

Clause 5.10 of the Warringah LEP 2011 has been prepared in accordance with the NSW Government's Standard Instrument—Principal Local Environmental Plan, and is consistent with current heritage best practice guidelines, providing for the protection of heritage buildings, places, works and trees, heritage conservation areas, and archaeological relics. Items that are identified as having local heritage significance are listed on Schedule 5 'Environmental heritage' of the LEP. No Aboriginal or historic archaeological sites or items are identified on or within the immediate vicinity of 612-624 Pittwater Road.

2.3 National Parks and Wildlife Act 1974

Under the provisions of the *National Parks & Wildlife Act 1974* (amended 2010; NPW Act), the Director-General of the NPWS (now part of OEH) is responsible for the care, control and management of all national parks, historic sites, nature reserves, state conservation areas, karst conservation reserves and regional parks. The Director-General is also responsible, under this legislation, for the protection and care of native fauna and flora, and Aboriginal places and objects throughout NSW.

All Aboriginal Objects are protected regardless of their significance or land tenure under the NPW Act. Aboriginal Objects can include pre-contact features such as scarred trees, middens and open camp sites, as well as physical evidence of post-contact use of the area such as Aboriginal built fencing and fringe camps. The NPW Act also protects Aboriginal Places, which are defined as a place that 'in the opinion of the Minister, is or was of special significance with respect to Aboriginal culture'. Aboriginal Places can only be declared by the Minister administering the NPW Act. There are no declared Aboriginal Places within the study area or its vicinity.

Under Section 90 of the Act, it is an offence for a person to harm an Aboriginal Object or Aboriginal Place without the prior issue of an Aboriginal Heritage Impact Permit (AHIP). The Act requires a person to take reasonable precautions and due diligence to avoid impacts on Aboriginal Objects. AHIPs may only be obtained from the Environmental Protection and Regulation Division (EPRD) of OEH.

The *National Parks and Wildlife Amendment Regulation 2010* commenced on 1 October 2010. This Regulation excludes activities carried out in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (OEH 2011) from the definition of harm in the Act. That is, test excavations may be carried out in accordance with this Code of Practice, without requiring an AHIP. The Regulation also specifies Aboriginal community consultation requirements (*Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*). In addition, the Regulation adopts a

Due Diligence Code of Practice which specifies activities that are low impact, providing a defence to the strict liability offence of harming an Aboriginal object.

Under Section 89J(1)(d) of the EP&A Act, Health Infrastructure was not required to apply for an AHIP for SSD 6980 (see Section 2.2 above).

2.3.1 Aboriginal Heritage Information Management System (AHIMS)

Part of the regulatory framework for the implementation of the NPW Act is the Aboriginal Heritage Information Management System (AHIMS), maintained by OEH. AHIMS includes a database of Aboriginal heritage sites, items, places and other objects that have been reported to the OEH. Also available through AHIMS are site cards, which describe Aboriginal sites registered in the database, as well as Aboriginal heritage assessment reports, which contribute to assessments of scientific significance for Aboriginal sites. The AHIMS is not a comprehensive list of all Aboriginal heritage sites in NSW, rather it reflects information which has been reported to OEH. As such, site co-ordinates in the database vary in accuracy depending on the method used to record their location. Heritage consultants are obliged to report Aboriginal sites identified during field investigations to OEH, regardless of land tenure, or whether such sites are likely to be impacted by a proposed development.

2.4 Heritage Act 1977

The *Heritage Act 1977* (Heritage Act) provides protection for heritage places, buildings, works, relics, moveable objects, precincts or archaeological sites that are important to the people of NSW. These include items of Aboriginal and non-Aboriginal heritage significance. Where these items have State heritage significance, they are listed on the State Heritage Register (SHR).

Part 4 of the Heritage Act refers to the effects of listing on the SHR and interim heritage orders (IHOs). There are no items or places within the study area, or its vicinity, listed on the SHR, nor are there any IHOs applying to the site.

Part 6 Division 9 refers to the protection to archaeological relics, features or deposits. Sections 139 to 145 of the Act require that excavation or disturbance of land that is likely to contain, or is believed may contain, archaeological relics is undertaken in accordance with an excavation permit issued by the Heritage Council (or in accordance with a gazetted exception under Section 139(4) of the Act).

The Heritage Act defines an archaeological relic as:

any deposit, artefact, object or material evidence that:

(a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and

(b) is of State or local heritage significance.

Under Section 146, the Heritage Council must be notified immediately if relics are unexpectedly discovered or disturbed. In some cases, the Heritage Council may require works to cease pending consultation and further research.

3 Environmental Context

An understanding of environmental factors within the local landscape provides a context for past human occupation and history of an area. The analysis of environmental factors contributes to the development of the predictive modelling of archaeological sites, but it also is required to contextualise archaeological material and to interpret patterns of past human behaviour. In particular, the nature of the local landscape including topography, geology, soils, hydrology and vegetation are factors which affect patterns of past human occupation.

3.1 Geology and Topography

The study area is underlain by the Wianamatta Group, which comprises Bringelly Shale, Minchinbury Sandstone and Ashfield Shale which was formed in the Middle Triassic (Sydney 1:250 000 Geological Map Sheet S156-5 1996). This geological landscape does not generally result in stone outcrops suitable as surfaces for art (such as engraving and drawing/painting), manufacturing or sharpening stone tools, or shelters for camping. As such, rock engravings, grinding grooves, rock shelters and quarry sites are unlikely to be present in the study area. In the vicinity of the site, the natural topography has been altered by residential development, commercial development (in particular the construction of the Warringah Mall complex) and the construction and upgrading of transport routes such as the Pittwater Road.

3.2 Soils and Disturbance

The *Soil Landscapes of the Sydney 1:100,000 sheet* (Chapman and Murphy 1989) maps the study area as occurring on the soil landscape grouping *Disturbed Terrain*. This soil landscape grouping is described as *Tufted fill areas commonly capped with up to 40cm of sandy loam or up to 60cm of compacted clay over fill or waste materials*. This level of disturbance makes the recovery of any intact Aboriginal Heritage sites highly unlikely.

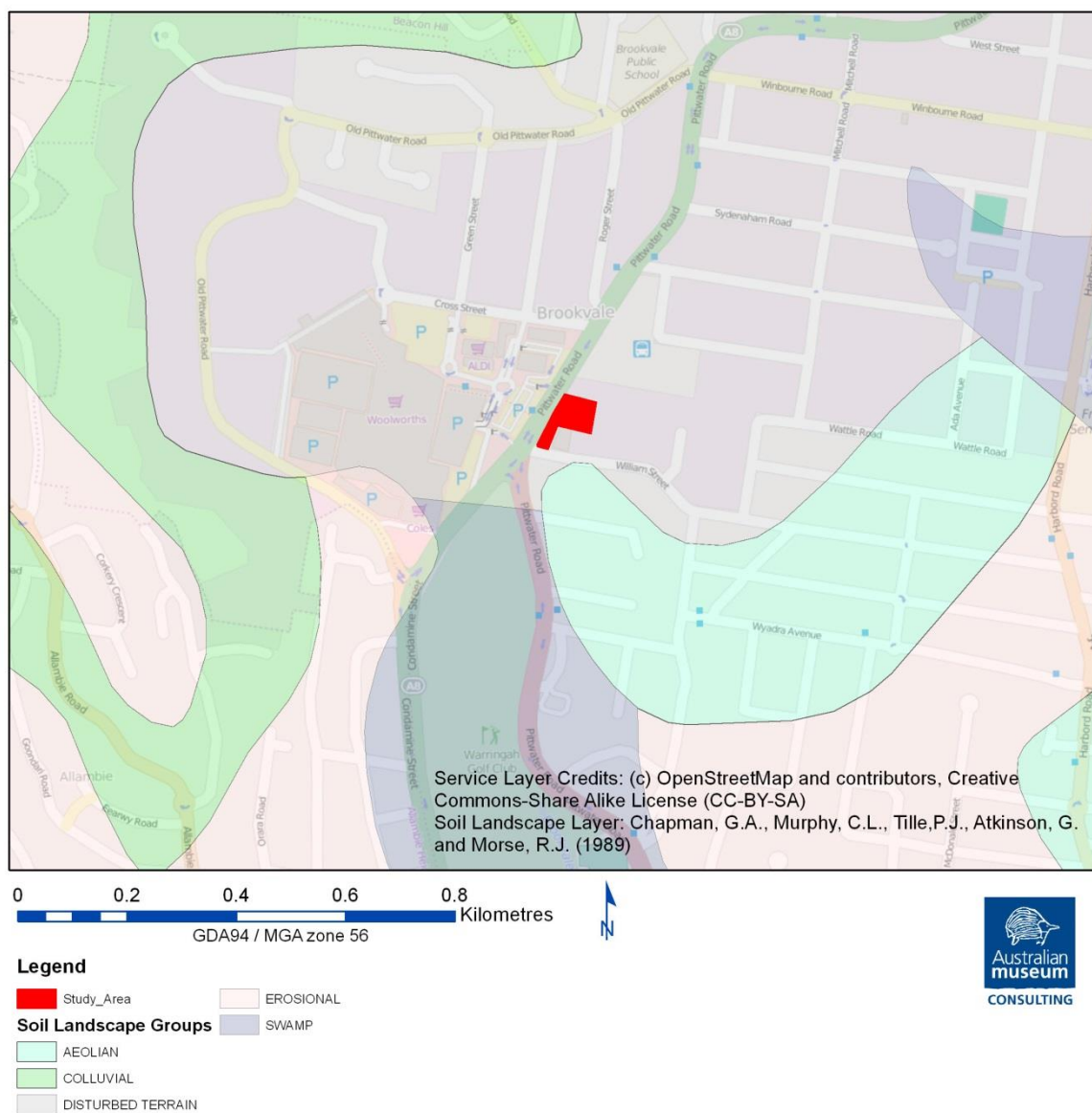


Figure 3.1 Map showing the study area in relation to the surrounding soil landscape groups.

3.3 Hydrology and Drainage

The southern boundary of the study area is presently located approximately 200m north of Brookvale Creek and an 1890 Parish Map (see Figure 5.1) of the area shows an a marked area of swamp approximately 150m from the south west corner of the study area. That a swamp was once present in this area is confirmed by presence of swamp soils immediately south of the study area (see Figure 3.1 above). Although hydrology and drainage patterns change over time, the current hydrological scheme suggests that water resources would have been available on a seasonal basis in close proximity of the study area. This hydrological scheme would have likely provided water resources for seasonal encampments of Aboriginal people.

4 Aboriginal Heritage Context

This section describes the nature of the known Aboriginal archaeology of the study area, based upon a review of relevant archaeological reports and publications, and a search and review of previously recorded sites in the OEH AHIMS database. This review and discussion allows for the development of a predictive model for potential Aboriginal sites within the study area. Summary descriptions of site features are provided in Table 4.1.

Table 4.1 Description of Aboriginal site features (after OEH 2012:8-10).

Site Feature	Description
Aboriginal Ceremony and Dreaming	Previously referred to as mythological sites these are spiritual/story places where no physical evidence of previous use of the place may occur, e.g. natural unmodified landscape features, ceremonial or spiritual areas, men's/women's sites, dreaming (creation) tracks, marriage places etc.
Aboriginal Resource and Gathering	Related to everyday activities such as food gathering, hunting, or collection and manufacture of materials and goods for use or trade.
Art	Art is found in shelters, overhangs and across rock formations. Techniques include painting, drawing, scratching, carving engraving, pitting, conjoining, abrading and the use of a range of binding agents and the use of natural pigments obtained from clays, charcoal and plants.
Artefacts	Objects such as stone tools, and associated flaked material, spears, manuports, grindstones, discarded stone flakes, modified glass or shell demonstrating evidence of use of the area by Indigenous people.
Burials	A traditional or contemporary (post-contact) burial of an Aboriginal person, which may occur outside designated cemeteries and may not be marked, e.g. in caves, marked by stone cairns, in sand areas, along creek banks etc.
Ceremonial Ring	Raised earth ring(s) associated with ceremony.
Conflict	Previously referred to as massacre sites where confrontations occurred between Aboriginal and non-Aboriginal people, or between different Indigenous groups.
Earth Mound	A mounded deposit of round to oval shape containing baked clay lumps, ash, charcoal and, usually, black or dark grey sediment. The deposit may be compacted or loose and ashy. Mounds may contain various economic remains such as mussel shell and bone as well as stone artefacts. Occasionally they contain burials.
Fish Trap	A modified area on watercourses where fish were trapped for short-term storage and gathering.
Grinding Grooves	A groove in a rock surface resulting from manufacture of stone tools such as ground edge hatchets and spears, may also include rounded depressions resulting from grinding of seeds and grains.
Habitation Structure	Structures constructed by Aboriginal people for short or long term shelter. More temporary structures are commonly preserved away from the NSW coastline, may include historic camps of contemporary significance. Smaller structures may make use of natural materials such as branches, logs and bark sheets or manufactured materials such as corrugated iron to form shelters. Archaeological remains of a former structure such as chimney/fireplace, raised earth building platform, excavated pits, rubble mounds etc.
Hearth	Cultural deposit sometimes marked by hearth stones, usually also contains charcoal and may also contain heat treated stone fragments.
Modified Tree	Trees which show the marks of modification as a result of cutting of bark from the trunk for use in the production of shields, canoes, boomerangs, burials shrouds, for medicinal purposes, foot holds etc., or alternately intentional carving of the heartwood of the tree to form a permanent marker to indicate ceremonial use/significance of a nearby area, again these carvings may also act as territorial or burial markers.
Non-Human Bone and Organic Material	Objects which can be found within cultural deposits as components of an Aboriginal site such as fish or mammal bones, ochres, cached objects which may otherwise have broken down such as resin, twine, dilly bags, nets etc.
Ochre Quarry	A source of ochre used for ceremonial occasions, burials, trade and artwork.
Potential Archaeological Deposit (PAD)	An area where Indigenous objects may occur below the ground surface.
Shell	An accumulation or deposit of shellfish from beach, estuarine, lacustrine or riverine species resulting from Aboriginal gathering and consumption. Usually found in deposits previously referred to as shell middens. Must be found in association with other objects like stone tools, fish bones, charcoal, fireplaces/hearths, and burials. Will vary greatly in size and components.
Stone Arrangement	Human produced arrangements of stone usually associated with ceremonial activities, or used as markers for territorial limits or to mark/protect burials.
Stone Quarry	Usually a source of good quality stone which is quarried and used for the production of stone tools.
Waterhole	A source of fresh water for Aboriginal groups which may have traditional ceremonial or dreaming significance and/or may also be used to the present day as a rich resource gathering area (e.g. waterbirds, eels, clays, reeds etc.).

4.1 Historical & Ethnographic Context

At the time of European settlement, the Aboriginal people of the greater Sydney region were organised into named territorial groups. Those groups local to the study area are likely to have spoken the coastal dialect of the Darug language. Speakers of the Darug coastal dialects extended from north of Botany Bay possibly as far as Broken Bay (Attenbrow 2010:34).

4.2 Regional Archaeological Context

Aboriginal occupation of the Sydney region is likely to have spanned at least 20,000 years, although dates of more than 40,000 years have been claimed for artefacts found in gravels of the Cranebrook Terrace on the Nepean River (Nanson et al. 1987; Stockton 2009; Stockton & Holland 1974). Late Pleistocene occupation sites have been identified on the fringes of the Sydney basin and from rock shelter sites in adjoining areas. Dates obtained from these sites were 14,700 BP at Shaws Creek in the Blue Mountain foothills (Kohen et al. 1984), c.15,000-c.11,000 BP at on a levee near Pitt Town adjacent to the Hawkesbury River (Williams *et al.* 2012), c.11,000 BP at Loggers Shelter in Mangrove Creek (Attenbrow 1981, 2004), and c.20,000 BP at Burrill Lake on the South Coast (Lampert 1971). The majority of sites in the Sydney region, however, date to within the last 5,000 years, with some researchers proposing that occupation intensity increased from this period (Kohen 1986; McDonald 1994; McDonald & Rich 1993); although Williams has recently argued that this is part of a longer trend in stepwise population growth and diversification of economic activity evident in south east Australia from the Early to Mid-Holocene (Williams 2013). This increase in sites may reflect an intensity of occupation which was influenced by rising sea levels, which stabilised approximately 6,500 years ago. Older occupation sites along the now submerged coastline would have been flooded, with subsequent occupation concentrating on and utilising resources along the current coastlines and in the changing ecological systems of the hinterland (Attenbrow 2010:55-56).

4.3 Local Archaeological Context

The number of sites or quantity of archaeological evidence found in any specific area varies. Further, the distribution of presently recorded sites in some areas is unlikely to be indicative of the original distribution of Aboriginal sites and therefore may not be a reliable guide to the occupation history of that area. There have been a number of archaeological investigations previously undertaken in the vicinity of the study area. The information in the following sections is based on reports that have been registered with the OEH AHIMS, and which are most relevant and informative to archaeological background of the current project.

4.3.1 Previous Archaeological Investigations

Table 4.2 Summary of Previous Local Aboriginal Heritage Investigations.

Report Author/ Date	Location	Reason for Investigation	Findings	Approximate Distance from study area
Brown 2011	Frenchs Forrest	Due Diligence for Heritage Impact Assessment	The presence of a macropod engraving thought to be present on the site was confirmed.	2.5km north west of the study area
Jackson 2011	Bantry Bay/Garigal National Park	Site Survey for a proposed Mountain Bike Track Route	The presence of four Rock Engraving sites was confirmed as well as a Shelter with associated deposits.	3-5km west of the study area
Byrne 1986	Beacon Hill	Survey for Archaeological sites for proposed business centre	Two rock engravings were uncovered within 20m of each other. One of a kangaroo and the other of a fish.	2.3km west of the study area
Dallas 1984	Manly Warringah War Memorial Park	Archaeological Survey for upgrade to Golf	Four engraving sites were located during the survey as well as two rock shelters with art.	2.6km south west of the study area

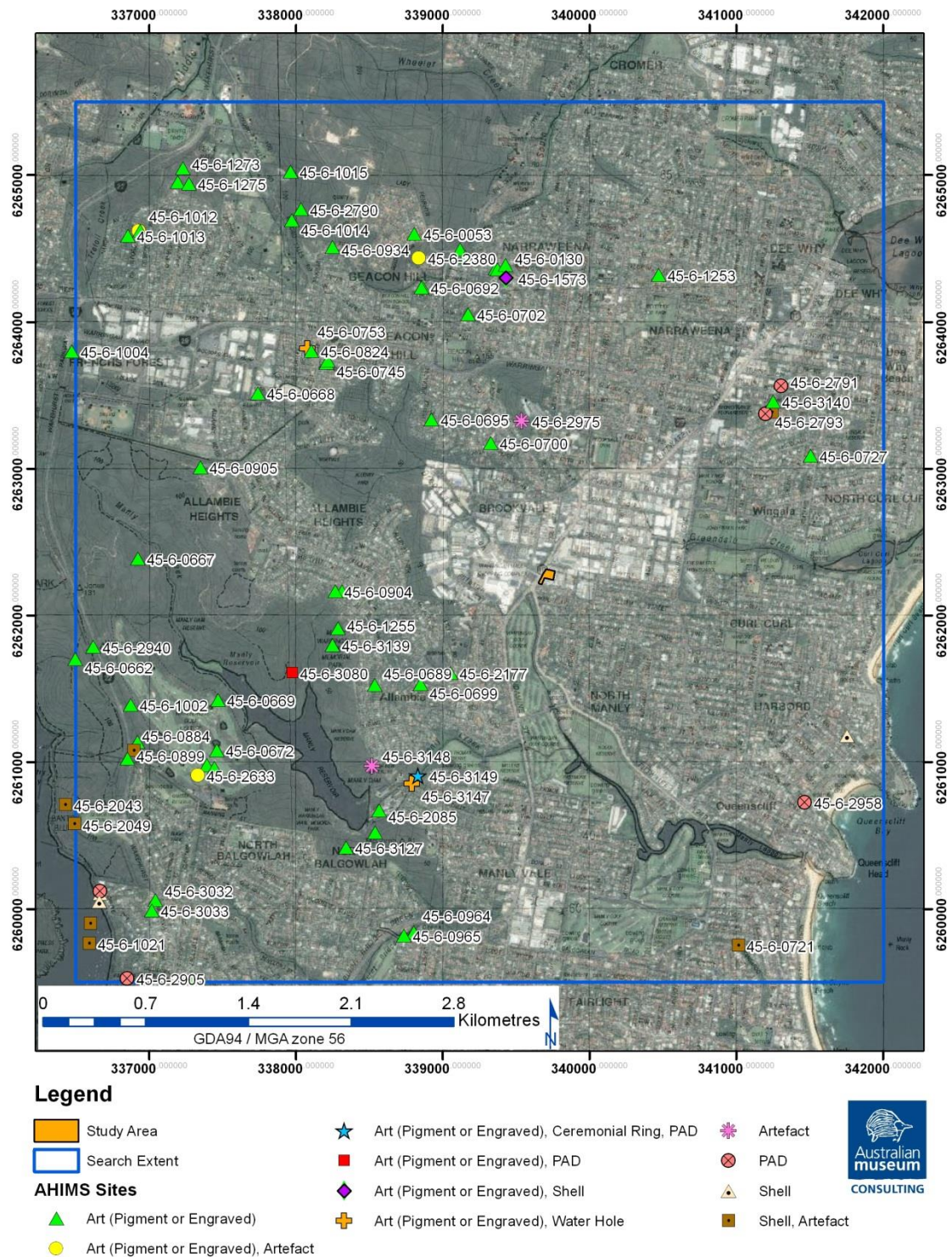
Report Author/ Date	Location	Reason for Investigation	Findings	Approximate Distance from study area
		Course		
Haglund 1982	Frenchs Forrest	Survey carried out for proposed water pipeline.	No Aboriginal heritage items were uncovered during the survey of the proposed pipeline but the potential for rock shelter sites in the immediate surrounds was noted.	3.5km north

4.3.2 Registered Aboriginal Sites

An extensive search of the OEH AHIMS database was submitted on 28 May 2015 (AHIMS client service ID#174901), identified 83 aboriginal sites within a 5.5x6km area centred on the study area, bounded by the following coordinates: Datum: GDA, Zone 56, Eastings: 336500-342000, Northings: 6259500-6265500 No Aboriginal heritage sites, objects or places have been recorded within, or near the study area. The search results are summarised in Table 4.3 and presented in Figure 4.1. Site types recorded closest to the study area are Art (Pigment or Engraved) sites on rock outcrops in and around the Manly Warringah War Memorial Park, Allambie Heights and Beacon Hill. It is notable that none of the registered Aboriginal sites fall within the “Disturbed Terrain” soil landscape as shown in Figure 3.1.

Table 4.3 Summary of Aboriginal sites previously recorded near the study area.

Site Feature	Number Present	Percentage (to 2 decimal places)
Art (Pigment or engraved)	57	68.67%
Art (Pigment or engraved), Artefact	3	3.61%
Art (Pigment or engraved), ceremonial ring, PAD	1	1.20%
Art (Pigment or engraved), PAD	1	1.20%
Art (Pigment or engraved), Shell	1	1.20%
Art (Pigment or engraved), Water Hole	2	2.40%
Artefact	2	2.40%
PAD	5	6.02%
Shell	3	3.61%
Shell, Artefact	8	9.63%
Total	83	100.00%



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure 4.1 Location of Aboriginal sites previously recorded near the study area.

4.4 Aboriginal Heritage Site Prediction Modelling

On the basis of the registered archaeological sites in the region, the review of previous archaeological studies, the environmental context of the study area, there is low potential for Aboriginal artefact sites to be present within the study area. Given the study area's location, within 200m north of Brookvale Creek, encampment of Aboriginal people may have occurred in the vicinity. However, such sites are likely to have been extremely disturbed, damaged and/or removed as a result of past vegetation clearance, and levelling and construction on the study area. It is therefore considered unlikely that any *in situ* Aboriginal artefact sites remain present within the study area. Should any artefact sites remain, they will be present in highly disturbed contexts, have low archaeological research potential and be of limited heritage significance.

Wide scale vegetation clearance has resulted in the removal of all original native vegetation, and there is therefore no potential for culturally modified trees survive in the study area. Stone quarry sites, axe grinding grooves, stone engravings/art and shelter sites are highly unlikely to be found in the study area due to the lack of suitable stone outcrops.

5 Historic Context

An understanding of the historic context of an area informs the potential for heritage items or archaeological sites to be present

5.1 Early Land Grants

European Settlement of the Brookvale area began in 1836 when William Frederick Parker was granted two parcels of land, each of 50 acres, on either side of what is now the Old Pittwater Road. Parker had arrived in NSW in March of 1828, aboard the *Courier* from South Africa with his parents, John and Elizabeth, and his brother Thomas. An article in the *Colonist* from February of 1838 describes the Parkers as *a respectable family of the humbler walks of life* (The *Colonist*, 28/2/1838). In 1837, Parker extended his property by purchasing a further 58 acres to the east of his original holdings and it is on this land that the study area is situated (Champion and Champion, 2013, p106-107). A track running through this land would later become the Pittwater Road. Having amassed a total of 158 acres in the area, Parker set to work clearing the land with the assistance of an assigned convict. He also constructed a house, in the vicinity of the study area, which he named *Brookvale* (dictionaryofsydney.org). This is the earliest association of the name Brookvale with the area which was known as Greendale until 1888 (*National Archives of Australia*, SP 32/1). The boundaries of Parker's holding can be seen in the detail from a Manly Cove parish map below (Figure 5.1). The area of resumed swamp shown on the map is now the location of the Warringah Golf Club and the study area is located to the north east of the junction of Pittwater Road and William Street.

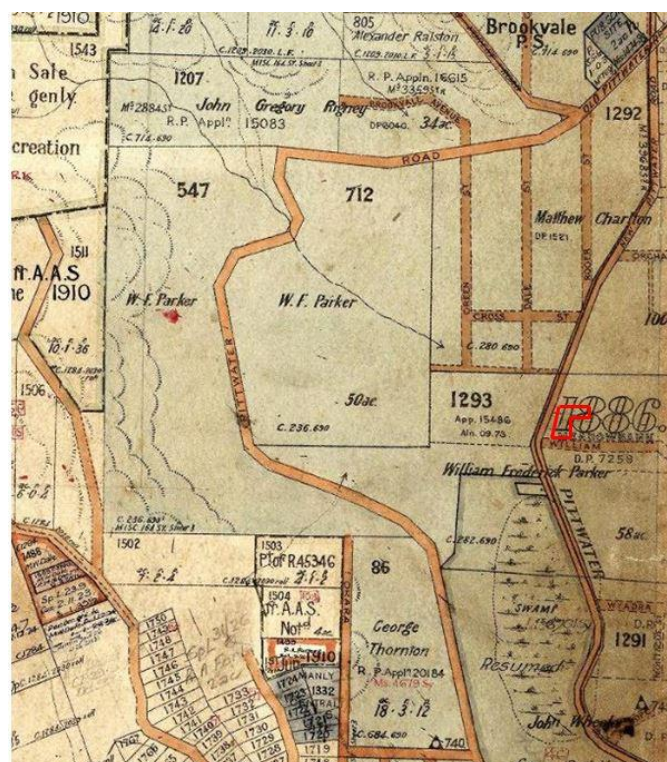


Figure 5.1 Detail from Sheet No.5 Parish of Manly Cove, County of Cumberland (1922). The approximate location of the study area is outlined in red.

5.2 Sub Division

Parker continued to live at Brookvale until his death in 1892 (*Sydney Morning Herald* [SMH] 31/12/1892). By the time of his death, his 158 acres in Brookvale had largely been subdivided. In 1879, Parker's son, William Francis, built a stone cottage near where Cross Street is today

(dictionaryofsydney.org). The cottage, which was known as *Brooklands*, stood on 25 acres of land that had been part of the parcel purchased by his father in 1837. In 1887 William Francis Parker donated land from his 25 acres to the Church of England which became the site of St. Luke's Church on Pittwater Road. William Francis Parker lived at *Brooklands* until his death in 1927 (SMH 5/7/1927). The 1884 sales lithograph shows two buildings opposite each other on either side of the Pittwater Road, one of which is marked *Parker* (Figure 5.2). It is probable that the house marked *Parker* was *Brookvale*, built by William Frederick Parker, and that the building opposite was the stone cottage *Brooklands*, built by his son William Francis. The relation of *Parker* to the junction of Pittwater Road (The Main Road) and Cross Street in the lithograph suggests that the original Parker homestead may have been located in the northern part of the study area, or 628 Pittwater Road immediately to the north.

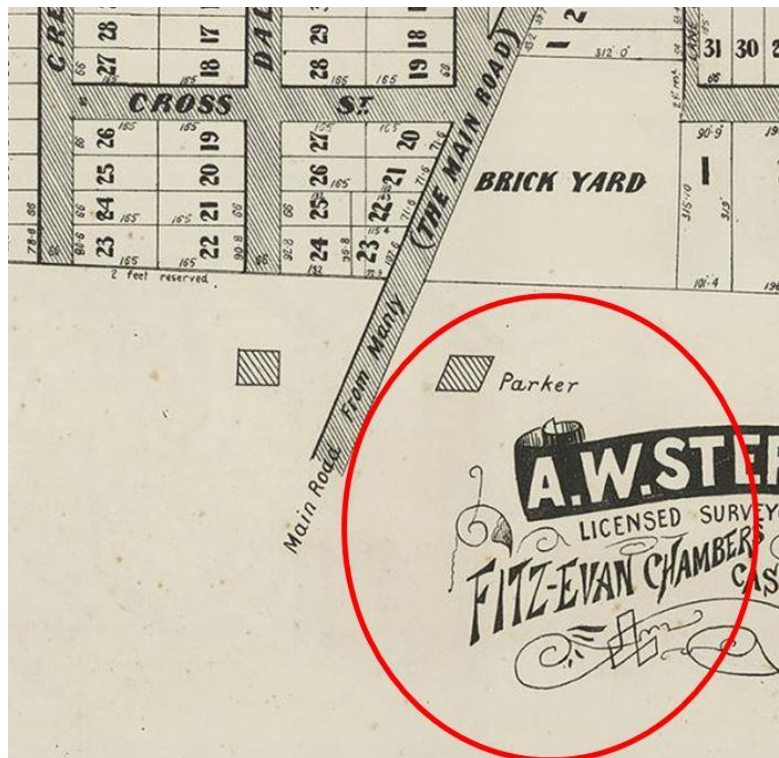


Figure 5.2 Detail from 1884 sales lithograph advertising property at Greendale Manly for auctioneers Watkin and Watkin. The study area is within the approximate area outlined in red (<http://acms.sl.nsw.gov.au/album/ItemViewer.aspx?itemid=1291971&suppress=N&imgindex=2>).

In approximately 1883, Sydney Malcolm bought 8 acres from William Frederick Parker, on which he built *Brookvale House* (SMH 25/03/1971). The house was located on Pittwater Road, on land currently occupied by the Warringah Mall, approximately opposite William Street.

William Frances Parker formally took possession of the land parcel including the study area on the 23 January 1894 (*Certificate of Title, Register Book Vol.1117 Folio 187*). A sketch map of the property on the 1894 Certificate of title shows three structures (Figure 5.3). Pittwater Road is represented as being on a slightly different alignment than it is currently.

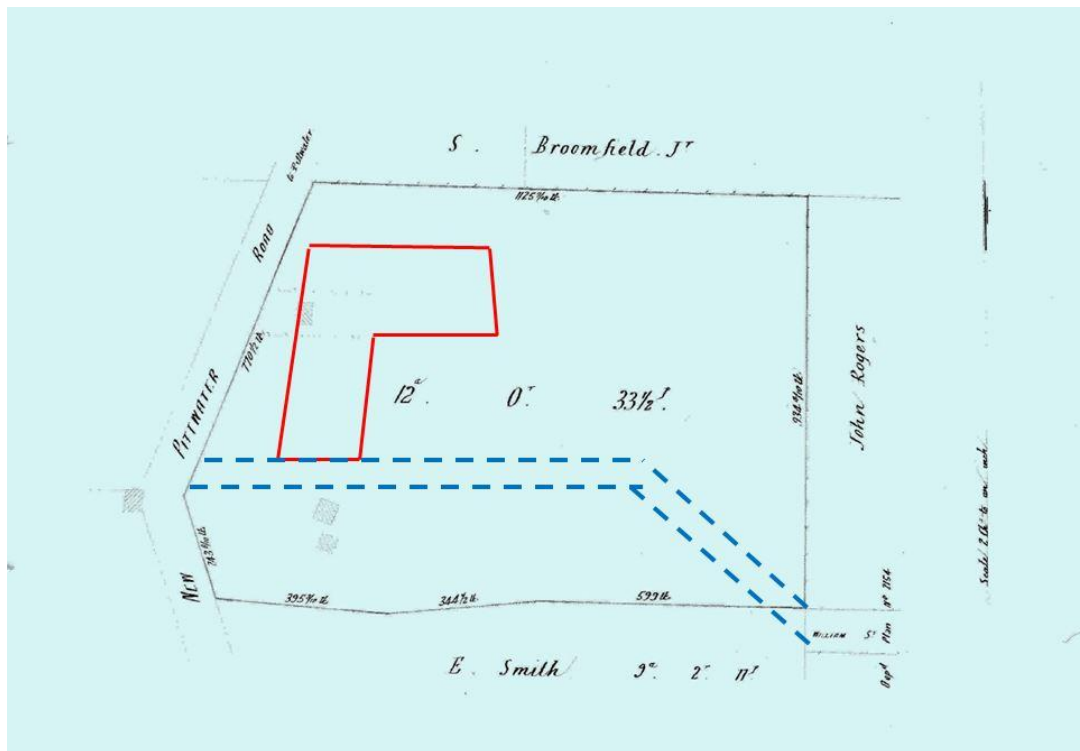


Figure 5.3 Sketch plan attached to the 1894 Certificate of Title Register Book Vol. 1117 Folio 187. The approximate location of the study area is outlined in red, the western boundary of which approximates the present alignment of Pittwater Road. The approximate modern route of William Street is shown by the dashed blue line.

By the time of his death in 1927, William Francis Parker had further subdivided the property. The 1894 Certificate of Title from which the sketch above (Figure 5.3) was taken indicates that some of the land had been sold to various parties over the years, including Thomas Watson in 1894, to Edward Ridge in 1897 and to Arthur Keisle in 1908. On the 26 May 1923, Louis Pincini took possession of the section of the study area that is now 612 Pittwater Road (Certificate of Title, Register Book Vol.3458 Folio 55). The 1948 sketch plan below shows 612 Pittwater Road divided in four, with pink indicating land resumed by the Commissioner of Main Roads for widening the Pittwater Road.

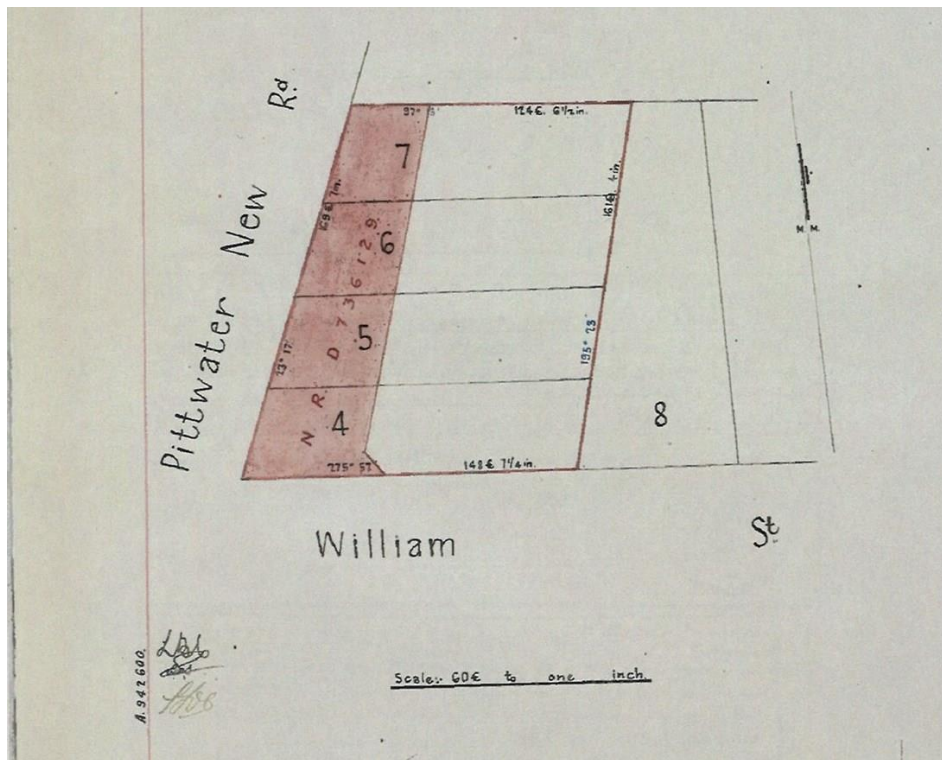


Figure 5.4 Sketch plan detail of the 1943 Certificate of Title, Register Book Vol.3458 Folio 55 with the parts of Lots 4,5,6 and 7, now 612 Pittwater Road, identified in pink for resumption for the road widening.

5.3 Twentieth Century Urbanisation

Despite the subdivision of William Parker's original holdings, and the extension of the tramline to Brookvale in 1910, the study area remained relatively undeveloped until the 1940s (Figure 5.5). There was a single structure in the study area at 620 Pittwater Road. The property at 624 Pittwater Road seems to have been used for agriculture, while 612 Pittwater Road has been left undeveloped, although there appears to be an informal path cut diagonally through the property from William Street to Pittwater Road.



Figure 5.5 1943 Aerial Imagery of the study area (outlined in red) The yellow line represents the portion of the original property resumed for the Pittwater Road widening in 1948. *Brookvale House* is visible on the far left of the image. (<http://maps.six.nsw.gov.au/>).



Figure 5.6 Current aerial of the site with a later house on 620 Pittwater Road (DP 500541). (<http://maps.six.nsw.gov.au/>).

No historical evidence can be found to suggest that any structures were present at 624 Pittwater Road prior to the construction of the commercial warehouse building currently on the site. The location of

Parker on the 1884 sales lithograph and the position of the structures on the 1894 Certificate of Title indicate that it is possible that the building within the study area on the 1943 aerial was William Frederick Parker's original *Brookvale* home (see Figure 5.2). The 1943 aerial shows no other structure or remains of a structure addressing Pittwater Road between William Street and the Pittwater Road junction with Cross Street. Comparison of the 1943 aerial with the current aerial shows clearly that the now derelict house at 620 Pittwater Road is built largely over the earlier building, which may have been William Frederick Parker's *Brookvale*. The pedestrian bridge tower to be constructed on the western side of the road will stand on what was vacant land to the north of *Brookvale House*. Pittwater Road was eventually developed into a six-lane divided road (Broomham, 2001, p155). It is estimated that widening of the Pittwater Road may have claimed as much as 14m from the property at 620 Pittwater Road. At 612 Pittwater Road a service station was constructed and was in operation until 1997 and demolished in the following year. In recent years the site has been remediated and works included the removal of 11 sub-surface tanks. (SMEC 2014).

6 Physical Assessment

The study area comprises three properties: 612, 620 and 624 Pittwater Road. It slopes gently from east to west at 612 Pittwater Road (approx. 5%) with 620 and 624 Pittwater Road being at a slightly lower level and almost completely flat. From the east side of 612 Pittwater Road there are views over the Warringah Mall complex to Allenby Park in the west and towards Beacon Hill to the north-west. The study area is bordered to the west by the Pittwater Road, to the south by William Street, to the east by 624 Pittwater Road and 2-4 William Street and to the north by an access road to 626 Pittwater Road.

The remains of the concrete forecourt of the service station is extant at 612 Pittwater Road. The concrete surface had evidently been disturbed in several areas, likely as a result of site remediation carried out subsequent to the closure of the service station (Figure 6.1). A chain wire security fence encloses the southern and western boundary of the site, the fence continues across the front of 624 Pittwater Road. This part of the study area has an approximate area of 1385m² and is rectangular in shape.



Figure 6.1 View south-west, from near the boundary between 612 & 620 Pittwater Road, showing the remains of the concrete forecourt of the service station, areas of disturbance caused by remediation activities, the storage of some building materials and partial regrowth of grass and weeds in patches.

There is no physical boundary between 612 Pittwater Road and 620 Pittwater Road which bordered it to the north. With an area of approximately 1275m², 620 Pittwater Road is rectangular in shape and may have been the only part of the study area to have ever been put to residential use. It is the site of a derelict brick house and two out buildings, with the remains of a third visible through the undergrowth in the south west corner of the property (Figure 6.2). The land surrounding the buildings is considerably overgrown with grass and weeds including *Bidens Pilosa* (Cobbler's Peg). Where exposed, the soil is a sandy clay showing occasional inclusions of crushed demolition material. There are several small areas of dumped material on the property, including a pile of red bricks and some discarded shopping trolleys along the fence line dividing the property from the footpath and bus shelters along the Pittwater Road.



Figure 6.2 View north-west of the house at 620 Pittwater Road. The south wall of Barbeques Galore at 624 Pittwater Road is visible to the right of the house.

The area on the western side of Pittwater Road; the location of the pedestrian bridge tower, is presently occupied by the Westfield/Warringah Mall bus shelter within a grassed area. The area has been disturbed by construction activities associated with the shopping mall and road improvements.



Figure 6.3 View north--west. The pedestrian bridge tower will be located in approximately the area of the red circle.

A commercial/warehouse complex stands at 624 Pittwater Road, which is an L-shaped block of approximate area 2720m². The commercial warehouse complex consisted of a single structure divided into several units, with a Barbeques Galore store facing the Pittwater Road (Figure 6.4). The building stands on the south and east boundary with the neighbouring property, 620 Pittwater Road, creating a semi-enclosed area at the rear (east) part of 624 Pittwater Road. The enclosed area acts as a loading bay for the warehouse. It seems likely that the building was extended over time as the rear of the building appears to show more general wear and tear. The area around the warehouse/commercial building has been sealed with an asphalt surface. There is a car park area in front of the Barbeques Galore store, separated from the footpath by a raised brick flower bed. A defined area of concrete in the asphalt surface at the rear of the Barbeques Galore building suggests that a portion of the asphalt surface was excavated for the installation of services. The area consists of a rectangle measuring 2.5m from east to west and 3.2m from north to south. There are two linear cuts, likely infilled pipe trenches, extending from the rectangular area. One runs west of the rectangle into Barbeques Galore, the other exits the site to the north. This is indicative of likely extensive sub surface disturbance of the site.



Figure 6.4 View south-east of the commercial/ warehouse building at 624 Pittwater Road. The darker macadam on the left of the photograph represents the access road to 626 Pittwater Road and the Northern extent of the study area.



Figure 6.5 View south of the warehouses at the rear of 624 Pittwater Road. The shape of the concrete area in the foreground suggests sub surface services have been installed there.

6.1 Discussion

Over 80% of the previously recorded Aboriginal sites near the study area relate to rock art (Pigment or Engraved). The physical analysis of the study area established that there were no rock outcrops on the site. The soil landscapes map shows the study area to be within a Disturbed Terrain landscape. In addition, there are no previously recorded Aboriginal sites within this soil grouping within the region of the study area. The physical analysis confirmed that there was considerable development both within the study area and surrounds. The only property within the study area not to be sealed by a concrete or asphalt surface is 620 Pittwater Road, where the exposed soil exhibited evidence of disturbance with a scatter of building rubble. The property had also clearly been disturbed by the construction of outbuildings and garden features associated with the house. The location for the proposed pedestrian bridge tower displayed no undisturbed natural surface. These factors indicate that it would be extremely unlikely that any sites of Aboriginal heritage importance would be present to be impacted upon during the construction of the proposed Health Centre.

There is no historic evidence for buildings having been constructed at 624 or 612 Pittwater Road. The historic background indicates that the, now derelict, house standing on the 620 Pittwater Road, is partially constructed over the earlier building visible on the 1943 aerial. The house shown on the 1943 aerial may or may not be the same house shown on the 1884 sales lithograph and the sketch plan from the 1894 Certificate of Title. As there is no record of the house between 1894 and 1943, partly due to the absence of Rates Books, it is by no means certain that it is the same house. However if it the same house it is likely that it is *Brookvale*, the apparently modest home of the first settler in the area, William Frederick Parker. The widening of Pittwater Road in 1948 and again in the 1960s, as well as the construction of the house currently on the property, would have significantly disturbed any potential archaeological remains.

All buildings currently standing on the study area date no earlier than the mid-twentieth century as none is present on the 1943 aerial of the study area.

7 Conclusion

Based on the physical analysis of the site and the review of background material relating to the study area and its surrounds the following conclusions have been reached.

7.1 Aboriginal Heritage

No Aboriginal archaeological sites, objects or places, or areas of archaeological potential or Aboriginal sensitivity, were identified within the study area. The results of the site inspection confirmed extensive disturbance from residential and commercial development and it is therefore considered highly unlikely that evidence of previous occupation by Aboriginal people remains within the study area.

No Aboriginal objects, or landscape features likely to indicate the presence of Aboriginal objects, were identified within the proposed Brookvale Community Health Centre impact area. Given (list disturbance history), it is considered highly unlikely that evidence of previous occupation by Aboriginal people remains within the area of the proposed development.

Recommendation 1

The proposed Brookvale Community Health Centre development area is unlikely to retain Aboriginal objects, and no further Aboriginal cultural heritage assessment is required prior to works.

7.2 Historic Heritage

The historic context of the study area failed to uncover any definitive evidence of historically significant activity, beyond agriculture, on 612 Pittwater Road or 624 Pittwater Road, or the site for the pedestrian bridge tower on the west side of Pittwater Road. The level of disturbance, confirmed by the site inspection, is such at these locations that it would be very unlikely that any historic archaeological evidence would have been preserved.

The presence of an early house at 620 Pittwater Road, that may have been connected with the Parker family, the first European settlers in the area, is confirmed in the 1943 aerial. The widening of the Pittwater Road and the construction of the later house, currently standing at the address, is likely to have destroyed much of the archaeological evidence. However there is potential for physical evidence of the earlier house or associated features; a cess pit, rubbish pits or outbuildings, to be extant, which should be managed appropriately.

Recommendation 2

There is potential for archaeological evidence of an early settler homestead and associated features to be extant at 620 Pittwater Road. As such that portion of the site should be addressed in accordance with the Archaeological Management Strategy outlined below.

7.3 Archaeological Management Strategy

The following strategy should be implemented to manage the archaeological potential in the 620 Pittwater Road site.

- Where excavation is required within the property boundary of 620 Pittwater Road, an excavation director whose experience complies with the Heritage Council of NSW criteria should be nominated to advise on the appropriate archaeological procedure.
- Prior to activities associated with the initiation of ground breaking works, the excavation director would develop information for induction to brief contractors on the 'relics' provisions of the *Heritage Act 1977*. The excavation director would be contacted in the first instance to verify significance of any archaeological features or relics that are exposed during works.
- Construction activities for the project have potential to expose archaeological relics associated with the building complex, and the excavation director should be on call to monitor, supervise and record the process, as required.
- Provision should be made in the works program to allow for open area excavation, where the physical remains of the early Parker house, *Brookvale*, or associated out buildings or cesspit/s warrant this approach. This would be determined by the excavation director in consultation with the client.
- All archaeological deposits, features and relics that are exposed during the works associated with the project would be recorded in accordance with heritage best practice standards and Heritage Council guidelines by, or under the supervision of, the excavation director.
- It is unlikely that works associated with the project would expose State significant relics. However, should unexpected relics which are identified as having State significance by the excavation director, be exposed, work would be required to cease and the Heritage Council would be informed, to determine the appropriate management strategy. The duration of this would depend on the integrity and significance of the relic.
- Following completion of all archaeological investigations the excavation director would prepare a report detailing the results of the fieldwork and post excavation analysis. The report would be prepared in accordance with current heritage best practice guidelines as identified by the Heritage Council, and would address the relevant research questions.

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Other Resources

NSW Land and Property Information, Certificates of Title (LPI, CT).

Appendix A

Aboriginal Sites recorded within 5.5x6km of the study area

Site ID	Site Name	Datum	Zone	Easting	Northing	Site Feature
45-6-0115	Dee Why;Parr Parade;	AGD	56	339374	6264362	Art (Pigment or Engraved) : -, Grinding Groove : -
45-6-2274	Frenchs Forest - (refer to 45-6-1273)	AGD	56	337195	6264955	Art (Pigment or Engraved) : -
45-6-1089	Frenchs Forest;Dee Why;	AGD	56	339117	6264497	Art (Pigment or Engraved) : -
45-6-0689	Frenchs Forest;Allambie Road;	AGD	56	338536	6261528	Art (Pigment or Engraved) : -
45-6-0695	Beacon Hill;Frenchs Forest;	AGD	56	338924	6263338	Art (Pigment or Engraved) : -
45-6-0699	Frenchs Forest;Flat Rocks;	AGD	56	338850	6261534	Art (Pigment or Engraved) : -
45-6-0700	Beacon Hill;Frenchs Forest;	AGD	56	339327	6263177	Art (Pigment or Engraved) : -
45-6-0702	Frenchs Forest;	AGD	56	339173	6264053	Art (Pigment or Engraved) : -
45-6-1255	Allambie Heights;	AGD	56	338287	6261912	Art (Pigment or Engraved) : -
45-6-1273	Belrose.	AGD	56	337230	6265050	Art (Pigment or Engraved) : -
45-6-1275	Belrose;	AGD	56	337270	6264946	Art (Pigment or Engraved) : -
45-6-1233	Manly Dam; Manly Vale	GDA	56	338540	6260523	Art (Pigment or Engraved) : -
45-6-2402	Maillolo Engraving;	AGD	56	338209	6263722	Art (Pigment or Engraved) : -
45-6-2177	Malinya Rd;	AGD	56	339052	6261610	Art (Pigment or Engraved) : -
45-6-2337	Red Hill, Narraweena 1	AGD	56	337964	6265026	Art (Pigment or Engraved) : -
45-6-1253	Dee Why;	AGD	56	340471	6264323	Art (Pigment or Engraved) : -
45-6-0727	Dee Why;	AGD	56	341507	6263089	Art (Pigment or Engraved) : -
45-6-0745	Beacon Hill;	AGD	56	338216	6263740	Art (Pigment or Engraved) : -
45-6-0752	Beacon Hill;	AGD	56	338105	6263805	Art (Pigment or Engraved) : -
45-6-0114	Dee Why;Manly Cove;	AGD	56	339360	6264365	Art (Pigment or Engraved) : -
45-6-0116	Dee Why;Narraweena (Manly Cove);	AGD	56	339154	6264446	Art (Pigment or Engraved) : -
45-6-0053	Dee Why.	AGD	56	338807	6264602	Art (Pigment or Engraved) : -
45-6-0934	Belrose; Warr-223B	AGD	56	338249	6264513	Art (Pigment or Engraved) : -
45-6-0963	Frenchs Forest;	AGD	56	336920	6261140	Art (Pigment or Engraved) : -
45-6-0130	Campbell;Belrose;Wheeler Creek;	AGD	56	339429	6264392	Art (Pigment or Engraved) : -
45-6-0662	Frenchs Forest;Bantry Bay;Wakehurst Parkway;	AGD	56	336498	6261705	Art (Pigment or Engraved) : -
45-6-0666	Frenchs Forest;Frenchs Forest Road;	GDA	56	337304	6259515	Art (Pigment or Engraved) : -
45-6-0667	Frenchs Forest;Curl Curl Creek;	AGD	56	336923	6262388	Art (Pigment or Engraved) : -
45-6-0668	Allambie Heights Warringah Rd Allambie Rd	AGD	56	337740	6263515	Art (Pigment or Engraved) : -
45-6-0669	Seaforth;Wakehurst Golf Club	AGD	56	337470	6261425	Art (Pigment or Engraved) : -
45-6-0670	Seaforth;Wakehurst Golf Club;	AGD	56	337394	6260981	Art (Pigment or Engraved) : -
45-6-0671	Seaforth;Wakehurst Golf Club;	AGD	56	337444	6260962	Art (Pigment or Engraved) : -
45-6-0672	Seaforth;Wakehurst Golf Club;	AGD	56	337462	6261082	Art (Pigment or Engraved) : -
45-6-0881	Allambie Heights;	AGD	56	338315	6262166	Art (Pigment or Engraved) : -
45-6-0899	Balgowlah;Bantry;	AGD	56	336853	6261025	Art (Pigment or Engraved) : -
45-6-	Balgowlah	GDA	56	338804	6259840	Art (Pigment or Engraved) : -

Site ID	Site Name	Datum	Zone	Easting	Northing	Site Feature
0964						
45-6-0904	Allambie Heights;	AGD	56	338268	6262167	Art (Pigment or Engraved) :-
45-6-0905	Sunnyfield Home;Allambie Heights;	AGD	56	337349	6263012	Art (Pigment or Engraved) :-
45-6-0824	Frenchs Forest;.	AGD	56	338106	6263804	Art (Pigment or Engraved) :-
45-6-1015	Belrose;	AGD	56	337964	6265026	Art (Pigment or Engraved) :-
45-6-0019	Dee Why	AGD	56	338860	6264244	Art (Pigment or Engraved) :-
45-6-0692	Beacon Hill Frenchs Forest	AGD	56	338856	6264237	Art (Pigment or Engraved) :-
45-6-2085	Hydro Cave	GDA	56	338568	6260671	Art (Pigment or Engraved) :-
45-6-0965	Balgowlah;200 FT Cave;	GDA	56	338734	6259820	Art (Pigment or Engraved) :-
45-6-1002	Balgowlah;	AGD	56	336873	6261392	Art (Pigment or Engraved) :-
45-6-1004	Frenchs Forest;	AGD	56	336473	6263801	Art (Pigment or Engraved) :-
45-6-1012	Belrose;Superlatives Cave;	AGD	56	336940	6264625	Art (Pigment or Engraved) :-
45-6-1013	Belrose;High Midpart Cave;	AGD	56	336856	6264590	Art (Pigment or Engraved) :-
45-6-1014	Belrose;Red Glow Cave;	AGD	56	337972	6264695	Art (Pigment or Engraved) :-
45-6-2790	Brooker Avenue Engraving Site 1	AGD	56	338034	6264770	Art (Pigment or Engraved) : 2
45-6-2940	Rock engraving (Garigal National Park)	GDA	56	336620	6261787	Art (Pigment or Engraved) :-
45-6-3032	Wakehurst Engraving MAN 104	GDA	56	337044	6260060	Art (Pigment or Engraved) : 1
45-6-3033	JAF Fenwick Engraving MAN 105	GDA	56	337019	6259990	Art (Pigment or Engraved) : 1
45-6-3127	Manly Dam Art Shelter Art 1	GDA	56	338340	6260420	Art (Pigment or Engraved) :-
45-6-3139	Monsera Engraving WARR350	GDA	56	338250	6261800	Art (Pigment or Engraved) :-
45-6-3140	Delmar Parade Engraving WARR191	GDA	56	341250	6263460	Art (Pigment or Engraved) :-
45-6-2589	Brentwood Place;Frenchs Forest;	AGD	56	336929	6264622	Art (Pigment or Engraved) :-, Artefact :-
45-6-2380	Red Hill 2 [further info. see report 101514]	AGD	56	338837	6264438	Art (Pigment or Engraved) :-, Artefact :-
45-6-2633	wgc-2	AGD	56	337330	6260910	Art (Pigment or Engraved) :-, Artefact :-
45-6-3149	Mermaid Pool (North)	GDA	56	338831	6260908	Art (Pigment or Engraved) :-, Ceremonial Ring (Stone or Earth) :-, Potential Archaeological Deposit (PAD) :-
45-6-3080	WGC 1 WARR214	GDA	56	337975	6261610	Art (Pigment or Engraved) : 1, Grinding Groove : 1, Potential Archaeological Deposit (PAD) : 1
45-6-1573	Alkira Circuit;Narraweena;	AGD	56	339431	6264300	Shell :-, Artefact :-, Art (Pigment or Engraved) :-
45-6-0753	Beacon Hill;	AGD	56	338077	6263821	Art (Pigment or Engraved) :-, Grinding Groove :-, Water Hole :-
45-6-3147	Mermaid Pool (South)	GDA	56	338790	6260855	Art (Pigment or Engraved) :-, Water Hole :-
45-6-2975	CS1 (Brookvale)	GDA	56	339537	6263325	Artefact : 1
45-6-3148	Manly Dam 1	GDA	56	338518	6260973	Artefact :-
45-6-2958	Undercliff Road RS and Midden	GDA	56	341465	6260726	Potential Archaeological Deposit (PAD) :-, Shell :-
45-6-2905	Boronia Lane Pad	GDA	56	336850	6259525	Potential Archaeological Deposit (PAD) :-
45-6-	CASTLE CIRCUIT RES 2	GDA	56	336664	6260120	Potential Archaeological

Site ID	Site Name	Datum	Zone	Easting	Northing	Site Feature
3063	MAN117					Deposit (PAD) : 1
45-6-2791	Studee Parade Shelter	GDA	56	341304	6263565	Potential Archaeological Deposit (PAD) : 1
45-6-2793	Sturdee Parade Shelter	AGD	56	341200	6263375	Potential Archaeological Deposit (PAD) : -
45-6-3062	CASTLE CIRCUIT RES 1 MAN078	GDA	56	336664	6260105	Shell : 1
45-6-3088	Castle CCT Reserve 3 Man	GDA	56	336660	6260050	Shell : 1
45-6-3048	Ronald Reserve Shelter WARR 194	GDA	56	341754	6261180	Shell : -
45-6-0884	Middle Harbour Creek;East Lindfield;Switching Station Shelter;dredged shell;	AGD	56	336895	6261078	Shell : -, Artefact : -
45-6-1020	Balgowlah;	AGD	56	336593	6259764	Shell : -, Artefact : -
45-6-0099	C.C.Y.S.4 Castle Cove Magazine Reserve	AGD	56	336600	6259900	Shell : -, Artefact : -
45-6-0721	Manly!	GDA	56	341014	6259750	Artefact : -, Art (Pigment or Engraved) : -
45-6-2049	Bantry bay 1;	AGD	56	336490	6260580	Shell : -, Artefact : -
45-6-2043	Bantry bay 2;	AGD	56	336430	6260710	Shell : -, Artefact : -
45-6-0018	Dee Why	AGD	56	341244	6263385	Shell : -, Artefact : -
45-6-1021	Balgowlah;Sit and Think Cave;	AGD	56	336593	6259764	Shell : -, Artefact : -