Aboriginal Archaeological Due Diligence Assessment

Manly Hospital, 150 Darley Road, Manly, NSW Proposed Reuse Options



Report to NSW Health

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Terms and abbreviations

Aboriginal Cultural Heritage Consultation	OEH guidelines to guide formal Aboriginal community consultation undertaken
Requirements for Proponents 2010	as part of an Aboriginal Cultural Heritage Assessment (ACHA).
Aboriginal Heritage Impact Permit (AHIP)	Statutory instrument the DG of the (OEH) issues under s.90 of the National
	Parks and Wildlife Act 1974 to allow the investigation (when not in accordance
	with certain guidelines), impact and/or destruction of Aboriginal objects.
Aboriginal object	A statutory term defined under the NPW Act 1974 as, 'any deposit, object or
	material evidence (not being a handicraft made for sale) relating to the
	Aboriginal habitation of the area that comprises New South Wales, being
	habitation before or concurrent with (or both) the occupation of that area by
	persons of non-Aboriginal extraction, and includes Aboriginal remains'.
AHIMS Aboriginal Heritage Information	The Office of Environment and Heritage (OEH) maintains the Aboriginal
Management System (AHIMS)	Heritage Information Management System (AHIMS) which includes:
	information about Aboriginal objects that have been reported to the Director
	General, Department of Premier and Cabinet; information about Aboriginal
	Places which have been declared by the Minister for the Environment to have
	special significance with respect to Aboriginal culture archaeological reports.
Alluvial	Referring to sediment deposited by channelled creek or overbank (flood) flow.
Artefact	Any product made by or caused to be made through human actions.
B.P.	Before Present. The 'Present' is defined as 1950.
Crest	A landform element that 'stands above all, or almost all points in the adjacent
	terrain' (Speight 2009:29).
Department of Environment, Climate	Now known as the Office of Environment and Heritage (OEH).
Change and Water (DECCW)	
Department of Planning and	The Consent Authority for development applications made in accordance with
Infrastructure (DPI)	Part 3A of the Environmental Planning and Assessment Act 1979.
Due Diligence Code of Practice for the	OEH guidelines outlining the first stage of a two stage process in determining
Protection of Aboriginal Objects in NSW	whether Aboriginal objects and/or areas of archaeological interest are present
	within a subject area. The findings of a due diligence assessment may lead to
	the development of a ACHA
Effective (survey) Coverage	Quantified estimate of the areas in which surface archaeological materials have
	been 'detectable' (exposed on the ground surface).
Environmental Assessment (EA)	Document summarising the assessment of environmental impacts of a
	development for approval under the EP&A Act 1979.
Environmental Planning and Assessment	Statutory instrument that provides planning controls and requirements for
Act 1979	environmental assessment in the development approval process.
Exposure	Areas of land where natural ground surfaces are exposed through processes
	such as soil erosion, sparse vegetation cover, and disturbance. The percentage
	of ground exposures recorded in different landforms contained within a study
	area are used to calculate effective archaeological survey coverage.
Flat (land form)	Planar landform element that is neither a crest nor a depression that is level or
	very gently inclined (Speight 2009:22).
Guide to Investigating, Assessing and	
	Guidelines developed by OEH to inform the structure and content of an
Reporting on Aboriginal Cultural Heritage	Aboriginal Cultural Heritage Assessment (ACHA).
Isolated Find	An isolated find is usually considered a single artefact or stone tool. The term
	"object" is used in the ACHA, to reflect the definitions of Aboriginal stone tools
	or other products in the National Parks and Wildlife Act 1974.
Lower Slope	Slope element not adjacent below a crest or flat but adjacent above a flat or
	depression (Speight 2009:21).
Mid Slope	Slope element not adjacent below a crest or flat and not adjacent above a flat
	or depression (Speight 2009:21).

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National Parks and Wildlife Act 1974	The NPW Act 1974 is primary piece of legislation for the protection of Aboriginal cultural heritage in NSW. Part 6 of this Act outlines the protection afforded to and offences relating to disturbance of Aboriginal objects. The Act is administered by OEH.
Office of Environment and Heritage (OEH)	The OEH is responsible for managing the Aboriginal heritage (and other) provisions of the NPW Act 1974.
Potential Archaeological Deposit (PAD)	Areas assessed as having the potential to contain Aboriginal objects. PADs are commonly identified on the basis of landform types, surface expressions of Aboriginal objects, surrounding archaeological material, disturbance, and a range of other factors. While not defined in the National Parks and Wildlife Act 1974, PADs are generally considered to retain Aboriginal objects and are therefore protected and managed in accordance with that Act.
Proponent	A corporate entity, Government agency or an individual in the private sector which proposes to undertake a development project.
RAP	Registered Aboriginal Party.
Upper Slope	Slope element adjacent below a crest or flat and not adjacent above a flat or depression (Speight 2009:21).
Visibility	Refers to the degree to which the surface of the ground can be observed. This may be influenced by natural processes such as wind erosion or the character of the native vegetation, and by land use practices.

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Report summary

This due diligence Aboriginal archaeological assessment has been prepared for *NSW Health* and has been completed in consultation with the *Metropolitan Local Aboriginal Land Council* (MLALC) to inform future building and land reuse options for Manly Hospital that s located on Darley Road in Manly, NSW.

Methods & objectives

This report follows the *Office of Environments & Heritage's* (OEH) *Due Diligence Code of Practice* (2010) with the objectives of identifying potential Aboriginal archaeological or historical heritage constraints that may exist for future uses of the place, and if they exist, guiding how these matters should be managed according to the requirements of the *National Parks & Wildlife Act 1974*.

Historical research and previous archaeological recordings

Manly has a significant Aboriginal history where a number of singularly and collectively important historical events took place immediately following or a very short time after White settlement in Port Jackson in January 1788. However, whilst each of these events took place in relatively close proximity to the current site of Manly Hospital (the events occurring somewhere in Manly Cove generically and/or most likely at Collins Beach in particular) no evidence has been sourced for this study for any significant Aboriginal event to have occurred on the land itself or Aboriginal history to be attached to the land occupied by the hospital.

AHIMS searches indicate that no Aboriginal archaeological sites or objects have previously been recorded within the Manly Hospital grounds or in locations nearby. The nearest known recordings are located along the foreshore zones to the north, west and south of the hospital, and well outside the study area.

It was predicted prior to field survey of the hospital grounds that future demolitions and road and car park surface removals and especially vegetation clearance of bush land at the southern and eastern site boundaries could expose intact sandstone surfaces with the potential to contain Aboriginal rock engravings or grinding grooves and remnant soils with potential to contain Aboriginal objects and/or archaeological deposits in exception preservation circumstances

Field survey

No Aboriginal archaeological sites or objects have been located, and the probability they are present within the vast majority f the hospital grounds is limited.

It is unlikely artefacts or intact sandstone surfaces survive beneath the footprints of the larger buildings (with basement) or elsewhere in broad terms except for and unless sealed below filled but otherwise unexcavated topography on the site perimeters.

As a whole, Manly Hospital is widely and extensively disturbed as a result of large-scale construction and landscaping and is unlikely to contain significant and intact Aboriginal archaeological evidence.

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Evaluation

It is concluded that future reuse options for Manly Hospital is unlikely to have a significant adverse impact upon the Aboriginal archaeological or historical heritage values of the place and no clear or obvious Aboriginal heritage constraints are apparent for the land at this time. However, the perimeter bush land and potentially the adjoining open space car parking and landscaped areas may retain remnant topsoil deposits and/or intact sandstone surfaces with the potential to contain Aboriginal objects and retain engravings.

Recommendations

- There are no specific Aboriginal archaeological or historical heritage constraints apparent that would restrict the development of future reuse options for Manly Hospital. The majority of the land comprising the central built form core of the hospital has been extensively modified by building and retains low to no Aboriginal archaeological potential. However, the southern and southeastern car parking areas and their adjoining landscape zones and fringing bush land may retain and/or contain sandstone surfaces that may have been engraved and remnant topsoil that may contain Aboriginal objects. This probability is however considered to be comparatively limited.
- It is recommended that a (low impact) geotechnical investigation of subsurface conditions beneath the existing
 car parking and landscaped surfaces be undertaken to identify if intact sandstone and soils are present/survive,
 and the results be used establish appropriate subsequent heritage management approaches in the context of
 future developments.
- It is also recommended that where future reuse options entail disturbance of the existing conditions of the fringing bush land surrounding the main grounds that the potential Aboriginal cultural heritage impacts of the proposal be evaluated at a site specific level by the MLALC as part of future development application processes.

1.0 Introduction

1.1 Background

This due diligence Aboriginal archaeological assessment has been prepared for *NSW Health* and completed in consultation with the *Metropolitan Local Aboriginal Land Council* (MLALC) to inform future land and building reuse options that are being developed for Manly Hospital located on Darley Road in Manly, NSW.





This assessment follows the methods required by the *Due Diligence Code of Practice for the Protection of Aboriginal Objects* (DECCW 2010) in order to identify potential Aboriginal archaeological (and historical) heritage constraints that may exist for the future uses planning for the site and subject to these findings, to recommend how future impact avoidance and mitigation measures can be implemented as required according to the provisions of the *National Parks and Wildlife Act 1974*.

Figure 1.2: Existing condition of the land (Google Maps 2018)



1.2 Development proposal

Future reuse of existing buildings and landscaped/open spaces within the Manly Hospital grounds, and potential encroachments into the bushland zones at the southern and eastern site boundaries are not confirmed. In general terms, future (small) building demolitions and surface removals (filled and levelled or contoured parking spaces and roadway/paths) and vegetation clearance around the edges of the built form of the hospital may potentially expose buried/obscured Aboriginal archaeological sites and objects. This may include the exposure of intact sandstone surfaces (filled or otherwise covered rather than cut-down and levelled) that were originally at ground level and retain the potential to contain Aboriginal rock engravings or grinding grooves and remnant. Soils with the potential to contain Aboriginal objects and/or archaeological deposits found in exceptional preservation circumstances may also survive in locations where past buildings have not entirely removed the original (potential) rock topography and soils beneath the building footprint.

1.3 Statutory protection for Aboriginal cultural heritage

Two pieces of legislation provide automatic statutory protection for Aboriginal heritage and the requirements for its management in NSW: These are the *National Parks and Wildlife Act* (1974 as amended) and *Environmental Planning and Assessment Act* (1979 as amended). The *Office of Environment and Heritage* (OEH) has the principal responsibility for the protection and management of Aboriginal sites, objects, places and cultural heritage values in NSW. These values are managed through the provisions of the *National Parks and Wildlife Act 1974* (NPW Act) which was amended through the *NPW Act Amendment Act 2010*. Key points of the amended Act are as follows:

- Part 6 of the NPW Act provides protection for Aboriginal objects and places by establishing offences of harm which is defined to mean destroying, defacing, damaging or moving an Aboriginal object. Aboriginal objects are defined by the NPW Act as 'any deposit, object or material evidence (not being a handicraft for sale) relating to Indigenous and non-European habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains'.
- A declared Aboriginal Place this is of special significance to Aboriginal people and culture is a statutory concept (and may or may not contain Aboriginal objects as physical/tangible evidence) and protection provided to Aboriginal objects and places applies irrespective of the level of their significance or issues of land tenure.
- It is an offence (under Section 86) of the NPW Act to knowingly, or cause or permit harm to an Aboriginal object (or place) without prior written consent from the DG of the OEH. Defences and exemptions to the offence of harm under the NPW Act include that harm is carried out under the terms and conditions of an approved Aboriginal Heritage Impact Permit (AHIP).

1.4 Report method and objectives

The 'Code' is a step by step method that involves 'taking reasonable and practical measures to determine whether your actions will harm an Aboriginal object and, if so, what measures can be taken to avoid that harm' (ibid:4). The steps in the due diligence processes are:

- 1. Step 1 Determining if the activity will disturb the ground surface or any culturally modified trees.
- 2. Step 2a Database search: Aboriginal heritage information management system (AHIMS) and known information sources.
- 3. Step 2b Landscape assessment.
- 4. Step 3 Impact avoidance assessment.
- 5. Step 4 Desktop assessment and visual inspection.

Aboriginal consultation is not required for investigations under the Code (DECCW 2010:3), but the Code does specify if the initial assessment identifies that Aboriginal objects will or are likely to be harmed by a proposed activity (such as land redevelopment), then further investigation and impact assessment is required. Where an Aboriginal Heritage Impact Permit (AHIP) is sought from the OEH, it will require the completion of a full program of Aboriginal community consultation. In general terms, where a due diligence assessment has identified that an AHIP is not required an activity should nevertheless proceed with caution. If Aboriginal objects are identified during the activity, then works should cease and the OEH notified (DECCW 2010:13).

1.5 Aboriginal consultation

The NSW Aboriginal Land Rights Act 1983 establishes the NSW Aboriginal Land Council and Local Aboriginal Land Council's and the Act requires these organisations to take action to protect Aboriginal culture and heritage of Aboriginal persons in the Council's area (subject to any other law) and to promote awareness in the community of this culture and heritage (ALR Act 1983, s52 [4]). The study area falls within the *Metropolitan Local Aboriginal Land Council's* administration boundaries.

This assessment has been undertaken in consultation with the *Metropolitan Local Aboriginal Land Council* (MLALC) and a draft version of this report has been reviewed by the MLALC and a copy of the Land Council cultural heritage statement for the land is appended (**Appendix 1**).

1.6 Report outline

This report presents the following:

- An introduction to the project (Section 1.0).
- A brief overview of the environmental setting of the Manly Hospital study area (Section 2.0).
- A review of previous Aboriginal heritage studies undertaken in the local landscape and a prediction of the type of Aboriginal heritage evidence might be present/survive on the site (Section 3.0).

- A summary of observations recorded during a recent inspection of the land, and an assessment of the archaeological sensitivity of the place relative to the likely impacts that may result from future building demolitions and land reuse options (Section 4.0).
- Aboriginal archaeological management recommendations (Section 5.0).
- Sources and references cited in this report (Section 6.0).

2.0 Environmental setting

2.1 Landscape setting and resources

The hospital has been constructed on part of the top and side slopes of a section of a Hawkesbury Sandstone ridge and its surface expressions within the current hospital grounds will likely have consisted of typically medium to coarse-grained quartz sandstone in various vertical and horizontal configurations according to local topography and elevation and terrain (landscape position) as described below.

The site is elevated and has commanding panoramic views and is situated midway between the various bays and inlets of North Harbour including Manly Cove illustrated below that is located about 300m (from the centre of the site) to the southwest (at Collins Beach), and also a number of open ocean beaches and rocky points that are located a bit less than 1km to the east of the hospital. The locality was therefore located centrally within a small or concentrated but also environmentally and ecologically diverse set of micro catchment that will have provided Aboriginal people with a range of coastal and harbour resource habitats that were each accessed by the ridge line that the hospital site forms a part.

Figure 2.1: Location and proximity of the hospital to a range of harbour bay and inlet (pink) and open coastal beach and points (blue) to the north, west and east (Google 2018)



2.2 Existing built form and vegetation

The image below shows the centre of the site is occupied by the majority of buildings and landscaped zones on the hospital grounds. Buildings extend to the western and northern site boundaries. What is generally down slope from this built form, the south eastern and southern boundary of the study area are defined first by surfaced car parking space and then comprises bush land of various form and integrity that commences up against the edges of the grounds and are buffered by topographic breaks or modified open spaces.

Figure 2.2: Vegetation and faunal mapping for the study area (Narla Environmental Pty Ltd 2018)



Although no building interior inspections were undertaken as part of this study, or floor plans reviewed, it is clear (and assumed) that many or most of the larger buildings have basements, and also that many of the smaller structures appear built on cut and levelled deep into bedrock and thereby retain little or no archaeological potential.

Soils that could be expected if they survive would comprise colluvial Hawkesbury Soil Landscape soils in upper elevations that include shallow, discontinuous lithosols and siliceous sands associated with rock outcropping to

deep lithosols, siliceous sands and localised yellow podsolics overlying sandstone and moderately deep brown and red podzolic soils overlying shales (Chapman & Murphy 1989). It is also possible that where sandstone surface exposure may have decreased as the topography sloped away to the south and east the soil transitions to the Lambert soil landscape.

There are no obvious creek lines on the site, but the likely sloping topography of the shelving sandstone would have allowed for a general drainage pattern of surface water to create water flowing downhill and trending to the southwest and probably discharging into the head of Collins Beach.

As illustrated and detailed in following sections, the open space car park zones to the south and southeast of the study area, and fringing bush land in both locations that is contained within the study area boundaries, would seemingly retain greater archaeological potential by virtue of the potentially diminished level of disturbance to landforms required to create and level a surface when compared to the building works that were required upslope that dealt with sloping and shelving sandstone terrain where benching and terracing of irregular rock outcrops required greater modifications of the existing landform. The fringing bush land has some unusual elements (such as the Banksia heath on Aeolian sands) and as a whole, although it has some weeds, nevertheless still retains many of its natural values and may contain undetected Aboriginal sites and/or objects on sandstone surfaces and buried in soils that have not been disturbed by development,

3.0 Historic Aboriginal and archaeological heritage context

3.1 Aboriginal heritage context

3.1.1 Preamble

Manly is a place with a significant Aboriginal history where a number of singularly and collectively important historical events took place immediately after or a very short time after White settlement in Port Jackson in January 1788. A couple of these events are briefly described below to illustrate the point. However, these are not all the important historical events and circumstances associated with Manly, and this is not intended to be an exhaustive discussion or present a wider Aboriginal history of the place which is beyond the scope of this due diligence assessment.

It is however noted that whilst each of these events took place in relatively close proximity to the current site of Manly Hospital (the events occurring somewhere in Manly Cove generically and/or most likely at Collins Beach in particular) no evidence has been sourced for this study for any significant Aboriginal event to have occurred on the land itself or Aboriginal history to be attached to the land occupied by the hospital.

3.1.2 Historical context

In order to contextualise the following Aboriginal historical events that are documented for Manly, the brief overview below has been adapted from a previous study (at Manly Vale) that examined the historical context of the site to help evaluate whether rock engravings with traditional design (boomerang) but European style and finish were of Aboriginal origin (they were created in the 1960s by a non Aboriginal man).

The first European descriptions of the country at Manly derive from records of Phillip's first inland exploration in April 1788 when a large party in ten boats landed at Manly Cove on the 14th of April and then explored northwards to encounter some brackish, stagnant water which they thought further examination would show to be a lake but was in fact present day Manly Lagoon. On the 16th of April, Surgeon John White also described some Aboriginal engravings which match a well-known group on the side of Bantry Bay Road in French's Forest on the ridge to the west of Curl Curl Creek head waters. Champion and Champion (2006) give an overview of this exploration and this is abridged below.

Having landed at Manly Cove, the exploration party became bogged in swamps (now reclaimed) beside Burnt Bridge Creek and were 'obliged' to go back the way they had come along the coast for a mile or two before arriving at Manly Lagoon approximately a mile from where they had first landed. The present lagoon (called Curl Curl Lagoon in 1884) was considerably larger before dredging and reclamation around the 1920s. On the 15^{th,} of April they rounded this lagoon and travelled four or five miles westward along the banks of a small fresh-water 'river' which was Curl Curl Creek (now Manly Creek below Manly Dam, but still Curl Curl Creek above the dam). The party seemingly turned inland on the north side of Manly Lagoon, along the higher land of Queenscliff, and after crossing somewhere near present Kentwell Road, which according to the parish map of Manly Cove dated 1884 was not a heavy swamp area, they would then have followed Curl Curl Creek inland for approximately the distance stated by White. Champion and Champion (ibid) note an 1887 plan of Manly Dam watershed (before the dam was constructed) indicates that there were no significant swamps in the Curl Curl Creek valley area which would have impeded their progress. The source of Curl Curl Creek was found to be a swamp, or boggy ground. White also describes having gotten into an *'immense wood, the trees of which were very high and large, and a considerable distance apart'* (French's Forest) in which they camped that night apparently near the head waters of Curl Curl Creek. On the 16th of April, White wrote that the party pursued a route westward many miles inland:

'without being able to trace that the natives had been recently in those parts. We saw, however, some proofs of their ingenuity, in various figures cut on the smooth surface of some large stones. They consisted chiefly of representations of themselves in different attitudes, of their canoes, of several sorts of fish and animals; and, considering the rudeness of the instruments with which the figures must have been executed, they seemed to exhibit tolerably strong likenesses. On the stones, where the natives had thus been exercising their abilities in sculpture, were several weather-beaten shells. The country all around this place was rather high and rocky; and the soil arid, parched, and inhospitable'.



Figure 3.1: Phillip's exploration in 1788 (Champion and Champion 2006)

Figure 3.2: One of the first Aboriginal engravings recorded in Sydney by Phillip's exploration party in 1788. The main site extends for over 300m but is badly damaged in parts from trail bikes. It includes images of a whale, fish, shields and distinctive crescent shapes (Stanbury and Clegg 1990)

3.1.3 The people

Other than the addition of recent research into the historical context for the use of the term 'Guringai' to refer to people who spoke a particular language and their country (Aboriginal Heritage Office 2015), our existing understanding of the traditional Aboriginal owners of this part of Sydney is still reliably guided by Attenbrow (2010) who provides a review of what we know of over thirty named Aboriginal groups who are recorded to have occupied the Sydney region in 1788. The update on the Guringai follows these dots points:

- People belonged to several different language groups that included the Guringai to the north (including Manly), the Darug (predominately) to the west, the Tharawal (predominately) to the south, with lands occupied by the Darkinjung and Gandangara converging to the northwest and southwest respectively.
- Groups appear to have often comprised multiple extended families ranging in size from 30 to 70 people or more that were organised around complex social, economic, spiritual and land-use inter-clan relationships that operated in 1788.
- Individual groups/clans had specific primary access rights to resource zones provided by the coast, river, and inland areas, but would have routinely interacted with each neighbouring clan/group as day by day needs dictated.
- Several dialect or language boundaries existed at Contact around the Sydney region between the coastal or 'saltwater' people and the inland or 'woods' groups, and that Sydney (coastal and hinterland) clans were bi-or multi–lingual.

- The lives of the people who formed some of the Aboriginal groups who lived immediately around Sydney Cove in 1788 are documented to have been devastated as a result of massive death rates from introduced disease and from rapid land dispossession.
- There is evidence that some aspects of the 'traditional' lives of groups who lived in areas more distant or 'remote' from Sydney, such along the northern beaches and into the hinterland, continued well into the historic period.
- However, while we have more detailed records for early interactions between Aboriginal people and the British at places such as Manly, we know relatively little about how people lived in the more rugged sandstone country 'hidden away' from the coastal strip during the earliest years. Most European records north of the Harbour date to when the land on the peninsula was more extensively explored and mapped from the mid 1790s.

The following is the executive summary of the AHO 'filling the Void':

The First Fleet officers made efforts to record and understand the language of the Aboriginal people they encountered as they began to set up the new colony on the lands they took over. The officers soon realised that there was not one uniform language and that the vocabulary was diverse and complex. Communications proved difficult and there were many potential misconceptions and misunderstandings in the interactions that took place and inevitably these ended up in the written record. These records document a society structured into 'tribal' groups – the officers recorded names for these 'tribes' and the area they were associated with but it is not always clear that the name was the name of the 'tribe'. They recognised a distinction in language or dialect between the Aboriginal people of the coast and those inland and those further north at Broken Bay. There is no record of the word 'Kuringgai' in the early accounts.

Anthropologists of the later nineteenth century using these early records, and the testimony of Aboriginal people still living in the areas, attempted a more definitive description of the language and structure of the Aboriginal society they believed was vanishing. Tribes without appropriate names were allocated names and links between tribes were established based on the customs and linguistic evidence as it was then known. John Fraser published the term 'Kuring-gai' in 1892 for a 'tribe' that he claimed stretched from the Macleay River to south of Sydney, possibly influenced by the name of the Gringai tribe of the Hunter River district and 'Kuri' for men. Kuringgai proved popular to those developing the northern areas of Sydney.

In the twentieth century revisions of the previous anthropological literature were made with new rigour and new tribal and language maps were produced using some of the names that were coined in the nineteenth century, including Kuringgai. 'Eora' a word for 'the men' was also adopted to name the language/tribe of the Sydney region.

By the twenty-first century linguistic research into Aboriginal languages produced a new understanding of the interrelationships of language and dialect in the region. Language boundaries were redefined and the term Kuringgai increasingly discouraged given its origin and previous associations. Other groups and the local community had in the meantime adopted 'Guringai' to define their own Aboriginal connections or identity.

3.1.4 Three significant historical interracial interactions at Manly Cove

To be completed

3.2 Archaeological context

3.2.1 Site types

Aboriginal archaeological sites have been located in all types of landform contexts in the Sydney region in general and these are registered with the Office of Environment and Heritage (OEH) Management System (AHIMS) Sites Register. Sites include:

- Shell midden deposits contained within both sandstone rock shelters of suitable size that provided protection to people in the past during possibly inclement weather conditions etc, and also in open contexts, most often in coastal/estuarine foreshore environments and/or adjacent to principal watercourses.
- Painted and drawn art images in (primarily) sandstone overhangs/shelters.
- Engraved images and axe grinding grooves created on the surfaces of usually flat rock platforms that are more predominant in Hawkesbury Sandstone landforms.
- Open campsites that are commonly represented by the presence of durable materials such as flaked (and occasionally ground) stone artefact scatters reflective of repeated site use of both short and long term duration.
- Occasional scarred and (rarer) carved trees. Most trees of a sufficient age to possess evidence for Aboriginal scarification have since died naturally and/or have been cut down during the post-Contact historical period.
- Some stone arrangements, waterholes, burials, and mythological sites reported to have been present in the landscape over time. Details for many of these types of sites are however often scant.
- A number of post-Contact historical Aboriginal campsites are documented in and around the Sydney region.

3.2.3 Archaeological overview of the Aboriginal occupation of Sydney

Aboriginal people have inhabited the Sydney region for possibly 30,000 years or more. Pleistocene age river terrace deposits along Parramatta River that underlie parts of the City has been archaeologically excavated in a number of with one site returning possibly the oldest date for the first Aboriginal occupation of the region (McDonald 2007:36-37). A site at Cranebrook Terrace has been dated to c.41,000 BP (Nanson et al 1987) but the precise association of the deposits with Aboriginal artefacts and this date is debated. At a wider level, Pleistocene sheltered occupation sites occur in the Blue Mountains and its foothills and one of these (Kings Tableland) has been dated to approximately 22,000 BP (Stockton & Holland 1974, Kohen et al 1984). Two dates ranging from 10,000 to 12,000 BP have also been reported for an open campsite at Regentville, while a rock shelter on Darling Mills Creek (at West Pennant Hills) has a date of a little over 10,000 years for first occupation.

The earliest dated coastal sites are located at Burrill Lake that shows evidence for first occupation approximately 20,000 years ago (Lampert 1971), and at Bass Point which is dated to some 17,000 years ago (Bowdler 1970). Both of these sites would have been occupied at a time when the sea level was much lower and the present coastline would have formed part of an inland environment drained by a series of rivers and streams. There are no other coastal Aboriginal sites of comparable age known at present.

Further sites dated to around 12,000–8,500 BP that consist of a shell midden at Kurnell (Doughboy Head 1 – Smith et al 1990) dated to c.12,000 BP, an open occupation site dated to approximately 9,300 BP at Discovery Point (close to Tempe House - McDonald CHM 2005:56), and a open campsite (containing a cooking hearth) identified at the Prince of Wales Hospital in Randwick that has returned a dated to c.8,400 BP (Godden Mackay Logan 1997:25-26) provide indications about how people lived around the time of sea level fluctuations and subsequent stabilisation during this period.

The majority of dated Aboriginal archaeological sites in the region are however within the last 2,500 to 3,000 years. Available evidence suggests that the early occupation of the Sydney landscape was not intensive nor included large groups of people, and that around 5,000-6,000 years ago (when sea levels had stabilized at the present levels) more intensive use of the landscape by Aboriginal people began. Many open sites situated away from the coast appear likely to have been first occupied in the last 1,500 years before Contact. JMCHM (2002a:475) explains these phases of Aboriginal occupation of the region in the following way.

Pre-Bondaian (before 9000 BP)

Preference for the use of silicified tuff for stone toll artefact manufacture, unless the investigated site is too great a distance from known sources and is often augmented with quartz and unheated silcrete materials. Cores and tools vary in size (some are quite large), but there are no backed artefacts, elouera, or ground stone implements. Unifacial flaking is a predominant technique for stone tool production during this period.

Early Bondaian (9000 to 4000 BP)

The archaeology suggests a preference for the use of silicified tuff to decline during this period where a greater use is made of local stone materials. Backed artefacts appear sporadically and bipolar flaking widely in use but rarely at individual sites.

Middle Bondaian (4,000 to 1,000 BP)

The use of different raw material types varied between sites and within sites over time. This is the main phase of backed artefact production and the introduction of asymmetric alternating flaking. Substantially smaller cores and tools are prevalent. Ground stone artefacts appear, though infrequently and present at fewer than half the dated sites. Elouera are present but rare.

Late Bondaian (1,000 BP to contact)

The use of different raw material types continued to vary. Backed artefacts decline, becoming rare or absent from most sites. Bipolar flaking techniques are evident at most sites. Ground stone at most dated sites in low frequencies. Elouera continued to be present but are rare.

3.2.3 Rock engravings

Rock engravings have been recorded in the local landscape in large numbers, and also in similar landscape positions and comparable landform contexts to that occupied by the hospital (sandstone ridge with elevation and views overlooking a harbour bay), and are possibly the most likely type of Aboriginal archaeological evidence that may survive beneath current (no basement) buildings, car parking surfaces or landscaped lawns and open spaces and it is of value to provide the following background context for rock engravings

The first systematic attempts to locate and record Aboriginal art sites in the Sydney Basin began during the 1890s with information on rock engravings in particular being gathered and published by people such as R.H. Mathews and W.D. Campbell. Earlier work had been carried out in Port Jackson by George Angus in the mid to late 1840s. A century later from the mid 1930s to the 1960s, F.D. McCarthy (then Curator of Anthropology at the *Australian Museum*) carried out extensive field trips in the Sydney region to assess the archaeological resources of the area (including rock engravings) which were recognised even at that time to be increasingly threatened by development.

No historical descriptions exist for Aboriginal people in Sydney making rock engravings, and no records recount Aboriginal people telling Europeans who had made them or what they may have signified. However, rock engraving continued to be made in Sydney after 1788. Numerous images (engraved and painted) of European sailing ships, soldiers, guns, cattle, along with other European subjects and objects survive in the landscape. Much of the interpretation of the engravings (and painted art sites) in the Sydney region is based on comparisons that have been made over time with areas for which more information has survived and/or where the art tradition (painting and/or engraving) had or has continued.

In 1990, it was estimated that around 2,000 rock engravings (consisting either of individual motifs and/or multiple figures) were known to occur around the sandstone landscapes of the Sydney region (Clegg and Stanbury 1990:2). Probably less than half of these were reported to have been recorded in any detail, and of these only a very few were well known. The numbers of figures (images or motifs) present at rock engraving sites in the Sydney region ranges from single items to over 150, and most of these have been created in a style commonly known as *'Simple Figurative'* where motifs are simple outlines, and sometimes in-filled. Maynard's (1976) model predicts that this art (and its style) is a relatively recent (Holocene) phenomenon. And this position is generally supported by this region's broader archaeological context. McDonald (2007) states Maynard's original definition still provides a good general description of the Sydney region's art:

'....the style is dominated by figurative motifs ... the majority of [these] ... conform[ing] to a pattern of crude naturalism. Whether the motif is engraved or painted, in outline or solid form, it usually consists of a very simple silhouette of a human or animal model. Most portrayals are strongly standardised. Human beings are depicted frontally, animals and birds in profile, snakes and lizards from above. Normally only the minimum visual requirements for recognition of the motif are fulfilled by the shape of the figure' (Maynard 1976:200-1)

Most Sydney engravings appear to have been created by a technique that is commonly referred to as 'conjoined-puncturing'. This is where a series of pits or punctures were first made, possibly along an outline drawn on the surface of the sandstone platform perhaps with ochre and/or scratched with a stick or stone. The 'pits' are sometimes found today between 2mm and 5mm deep at some sites and overlap in places to form a continuous groove whilst in others the pits may be spaced between 2cm and 5cm apart and have been subsequently abraded to deepen and widen the disconnected indentations to create a distinctive U-shaped groove representing the outline.

The types of implements used to create engravings is not precisely known, although it is likely that a range of materials were used as engraving tools including sharp pieces of bone, wood and stone before the introduction of steel implements from Contact. McCarthy (1976) reports on a piece of basalt with three abraded and rounded edges with striations that were located on a rock platform with engravings at Lake Conjola. The range of engraved motifs at sites in the Sydney region is diverse and includes:

- Human figures and footprints (mundoes).
- Anthropomorphs (human-like composite figures).
- Land mammals (including kangaroos/wallabies, dingo's, wombats, echidnas, koalas, possums, gliders etc) and their tracks.
- Marine animals (including fish, sharks, whales, eels, dolphins, turtles, stingrays and jellyfish).
- Items such as axes, shields, spears, clubs, fishing lines and canoes.

Art styles, meaning and variation of Sydney rock engravings (and painted sites) have been studied for a long time. It is unclear what the rock engravings of the region originally symbolised. However, in light of nineteenth century descriptions of initiation ceremonies and totemic associations, many engraved figures could be interpreted as having being produced in a spiritual or religious context.

None of the engraved sites in the Sydney district have been directly dated. However, a number of studies argue that the *Simple Figurative* engravings around the Sydney landscape are likely to be between 5,000 and 200 years old, with engravings continuing to have been made after colonisation.

Most engraved images in the Sydney region are generally homogenous in style and technique. However, some regional stylistic variations are nevertheless evident. For example, McMah (1965) identified a trend along the coast from north to south in the way kangaroos were depicted. In the north, kangaroo engravings have a single

foreleg, hind-leg and ear (a profile view) whereas in the south, a high proportion (90%) has two forelegs, two hind-legs, and two ears. The vast majority (97%) of these engraved images are in outline only. There is also a tendency towards further 'realism' in the southern part of the range in the increased frequency of the depiction of claws on the feet and of the genitalia being shown on these engraved figures. Although less clear, there is apparent a trend in the distribution of engraved motifs in the region for an increase from north to south in motifs depicting (possible) 'food' animals such as kangaroos/wallabies, emus, birds and fish (and other marine animals), where the proportional representation in motifs depicting human figures and weapons is greater to the south (Tracey 1974;23). The boundary separating the land to the north of Botany Bay from that to the south broadly correlates with the historically recorded boundary between the Tharawal language group and the coastal (and inland) Darug.

3.3 Local archaeological context

3.3.1 Database searches and known information sources

The Aboriginal Heritage Information Management System (AHIMS) is a database regulated under section 90Q of the *National Parks and Wildlife Act 1974* (NPW Act) and operated by the OEH to manage information and records related to registered Aboriginal archaeological sites (Aboriginal objects, as defined under the NPW Act) and declared Aboriginal places (as defined under the NPW Act) in NSW.

Kate Blackmore & associated Consultants (April 1986) reported in a Heritage Study for Manly in the mid 1980s that 56 Aboriginal heritage sites were known and recorded in the Manly Municipality. Over half were shell middens with less than one third engravings. It was predicted at that time more sites would be recorded in the future through systematic survey, and particularly within the Sydney Harbour National Park and some smaller Council Reserves. It is unknown how many have been added to that list since that time (or conversely that have been destroyed).

Searches of AHIMS (**Appendix 2**) to identify whether any previously recorded Aboriginal archaeological sites or objects or declared places occur within or adjacent to Manly Hospital indicate that no sites have been recorded in the grounds or within a reasonable buffer (see below).

However, there are twelve registrations for a 1km search cantered on the hospital. Two are not Aboriginal sites (according to AHIMS), two other registrations are duplications recorded for the obelisk at Collins Beach (AHIMS #45-6-2850) and the remainder are a mix of rock shelters with art and/or midden, rock engravings and open campsites but include a locally and regionally less common 'earth mound' (AHIMS #45-6-2849).

3.4 Aboriginal archaeological site prediction

The following types of Aboriginal archaeological evidence may survive within the Manly Hospital study area. However, these expectations need to be realistically assessed against the likely archaeological impacts that have resulted from the land use history of the place, and in particular the scale of landscape modifications that resulted from the construction of the hospital and change over time. These factors in combination are very likely to have destroyed or significantly disturbed any former subsurface sandstone and associated soil profiles that existed with potential to contain Aboriginal rock engravings and objects or archaeological deposits.

The following Aboriginal archaeological site predictive statement for the place was prepared on the basis on the above background heritage review, and prior to the commencement of the site inspection and assessment process of the land that has been undertaken as reported here:

- 1 Rock Shelters: Shelters/overhangs with art and archaeological deposit occur in considerable frequency in the local landscape. Even small, low and shallow sandstone overhangs that may have provided overhead shelter for a single person or acted as a windbreak of sorts have been reported with painted art and occasional archaeological deposit, and to a lesser extent associated PAD. The study area contains a number of cliff lines and breaks in terrain contour that may include sheltered spaces.
- II Rock Engravings: The distribution of engraved sites relates to the occurrence of suitable rock outcrops common in sandstone formations that were used by Aboriginal people in the past for the creation of engraved images. A considerable number of engraving sites are known to occur in the local landscape.

Engravings can occur in groups with numerous depictions of animals, human figures, possible spiritual motifs, and other images of equipment such as shields etc, or single depictions, that generally are found to occur on extensive level sandstone platforms along with smaller ledges and rock exposures.

III Axe Grinding Grooves: These are grooves which resulted from the manufacture and/or maintenance of the working edge of some stone tools such as axe/hatchet heads by people in the past. They may be found where suitable sandstone is exposed in, or adjacent to, creeks or on elevated platforms where wet-grinding techniques are possible adjacent to natural rock holes and shallow 'basins'.

As for rock engravings, axe/hatchet grinding grooves may occur in large 'clusters' that serves to facilitate their ready recognition, or may conversely comprise isolated items that are often difficult to detect within certain light conditions.

IV Open Camp Sites: These sites are likely to occur on dry and relatively flat landforms along or adjacent to both major and minor watercourses, along with foreshore zones. However, repeatedly or continuously occupied sites are more likely to be located on elevated ground situated at principal creek confluences in the local landscape.

Surface scatters of flaked stone artefacts (or potentially durable food remains such as animal and fish bone or shell) may be the result of mobile hunting activities, while single or low density occurrences might relate to tool loss, tool maintenance activities or abandonment. These types of sites are often buried in alluvial or colluvial deposits and only become visible when subsurface sediments are exposed by erosion or disturbance.

- V *Isolated Artefacts*: These items occur without any associated evidence for prehistoric activity or occupation. Isolated finds can occur anywhere in the landscape and may represent the random loss, deliberate discard or abandonment of artefacts, or the remains of dispersed artefact scatters. Manuports are items consisting of raw materials of stone that do not naturally occur within the soil profiles of a given region. Transported onto a site by Aboriginal people from sources elsewhere, these items will have subsequently been discarded before use as flaked or ground stone tools.
- VI Scarred Trees: These sites are the result of bark or wood removal to make shields, shelter, canoes containers or carving designs into the exposed wood. They have rarely survived early timber clearance, bush fires and timber cutting. The definite ascription of scarring to an Aboriginal origin is not always possible. Europeans often removed bark for roofing material and stock watering troughs. Other scars may be the result of surveyor and property owner blazes, lightning strikes or cockatoo pecking. Unless the tree is at least 175+ years old the scarring is unlikely to have an Aboriginal origin.

4.0 Site inspection

4.1 Recording methods and rationale

An inspection of the site and its immediate surrounds are reported here that were completed using standard field recording methods (see NPWS 1997 and OEH 2010).

The MLALC were not able to attend the site visit and it was decided to undertake a walkover of the built form and open spaces within the main hospital grounds to gain an understanding of landforms terrain nd building impacts and sample survey the surrounding vegetation around the southern and southeastern site boundaries to a level of archaeological confidence that is sufficient to support the findings and conclusions nd recommendations that are presented in this report. The bush land as a whole may also have Aboriginal cultural value that are not within the remit of this study, and it is recommended that if project timing permit and the MLALC express an interest in fully surveying this land, that it could be completed at a DA level and entail a site specific assessment at that time and when a specified impact is known.

In summary, the field recording reported here entailed the following:

- Walking the perimeter of the hospital and parts of the central interior building group spaces and internal road network within the facility (but not inside the buildings) to establish the nature and scale of the component buildings making up the site and the changes to pre-existing ground levels that resulted from the development. Sample survey of the southern and eastern bush land.
- Recording of observations useful to the assessment of Aboriginal archaeological sensitivity through a
 consideration of former landforms present within the site and within a wider coastal landscape context, former
 topography and terrain, current ground exposures/visibility and nature and extent of disturbance from building
 and landscaping recorded through digital photography.

4.2 Field observations

Indicative views of the Manly Hospital study area provided by the images below. These indicatively show in no particular order:

a) types of locations on the site where archaeological potential may exist but this potential is low or conversely where archaeological potential of all forms may have been entirely removed by past constructions and:

b) areas that may be considered more likely to retain potential for intact surfaces and soils to survive below current surfaces (until proven otherwise by geotechnical or landuse history data) such as deposits sealed beneath the perimeter car parking areas and its adjoining bush land. As noted below, no Aboriginal archaeological sites or objects or areas of specific PAD have been identified in the bush land areas sampled for this study, and on landscape grounds, none are extrapolated to be reasonably expected to be present in this perimeter vegetation.

With regard to the carpark areas as a group, they individually could have either been built over landforms that comprised surface rock outcrop that included flat and smooth sandstone platforms suitable for engraving and/or benching configured in a way that it retained at least some pockets of top soil. These landforms may have been filled and levelled as opposed to cut down and levelled.

The original sloping landform beneath these surfaces could also have comprised sloping terrain with jumbled and irregular rock outcropping or rubble slopes with shallow and probably highly mobile colluvial soils with limited archaeological potential to contain or retain Aboriginal objects because of shallow soil depth and susceptibility to erosion and/or simply because the terrain was steep and rocky and unattractive and offered no reason for people to stop and undertake an activity that would have left an archaeological trace.

Figure 4.1: The views from towards the City are expansive from the southern car parking areas that are bordered by bush land. It is possible road layouts such as that below were constructed following contours provided sandstone platform or benched outcropping and which may have been filled and levelled preserving original sandstone fabric in situ. The built-over parts of the hospital grounds located further upslope would theoretically possess even more expansive views and potential to contain 'ridge top rock engravings'



Figure 4.2: The car parking areas and smaller buildings in the foreground that may have comparatively shallow footings may be built upon filled sandstone topography while the construction of the larger hospital buildings in the background to the right are likely to have involved excavations that extended deep into bedrock



Figure 4.3: The land around the southern and southeastern perimeters of the hospital grounds that adjoin bush land may have filled over original terrain with archaeological potential for engravings and Aboriginal artefacts





Figure 4.4: It is unlikely that intact soil profiles exist below the larger buildings (with basements) on the site. Smaller buildings that have had lighter impacts may retain subsurface sand/soil profiles, but also generally unlikely for such areas as this

Figure 4.6: It is unclear whether the roadways across the lower parts of the site follow natural subsurface contours whilst other areas have clearly been cut down for basement spaces



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4.3 Summary

No Aboriginal archaeological sites or objects have previously been recorded within or immediately close by to the Manly Hospital study area, and none have been recorded by the current study. This is largely because the majority of the site footprint is covered by a central core of large buildings and to the south and southeast hard surfaces like car parking spaces and roadways, along with some landscaped green spaces transitioning to natural bushland around the perimeters of the built form of the hospital.

Although it is theoretically possible that Aboriginal objects and archaeological deposits may occur below small buildings with shallow footings (and no basements) or in locations that are outside of areas of widespread or deep disturbance zones, this nevertheless appears relatively unlikely in most parts of the site outside of the bush land zones and adjoining car parking areas and lawn strips that have not been built upon and may seal landforms with sandstone surfaces and soils with potential to be engraved in the case of the former, and the potential to contain Aboriginal objects (and less likely, deposits).

4.4 Managing potential Aboriginal archaeological resources

This assessment has been guided by the *Due Diligence Code of Practice* that encourages a precautionary approach when carrying out activities that may harm Aboriginal objects. The Code specifies that if the initial assessment identifies that Aboriginal objects will or are likely to be harmed by a proposed activity, then further investigation and impact assessment is required.

The following responses to the questions below provide the basis for the Aboriginal heritage management recommendations that are presented in the following section.

Determining if the activity will disturb the ground surface

Future reuse of the buildings and grounds at Manly Hospital may require future demolitions and earthworks that will generally affect only previously disturbed ground (from the original hospital building program) with minimal archaeological potential to retain intact subsurface sandstone or soils. In broad terms, it is not expected that large areas of previously undisturbed ground, such as within the fringing perimeter bush land with greater potential to contain Aboriginal objects or rock engravings, will be developed as a part of future use options being developed for the land.

Database search of AHIMS and other sources to identify if there are previously recorded Aboriginal objects or places in a study area

No Aboriginal archaeological sites or objects have previously been reported to occur within the boundaries of the Manly Hospital study area, or in any immediately nearby locations. The nearest known Aboriginal heritage sites are located in and around North Harbour to the west and north, and none of these sites will be affected by any future activity at the hospital Landscape assessment through identification of landscape features including land within 200m of water, dune systems, ridge tops, headlands and land immediately above or below cliff faces and/or rock shelters/caves

Each of these Aboriginal heritage landform sensitivity categories directly or broadly apply to the Manly Hospital site. The hospital occupies sandstone ridge top and side slope topography that has been extensively altered by historical landuse.

Impact avoidance assessment

No Aboriginal archaeological sites, objects or specific areas of PAD will be impacted upon by future reuse options at the hospital that may require demolition and rebuilding in locations that have already been disturbed and retain limited to no subsurface archaeological potential. However, future redevelopment of the car parking space areas along the southern and southeastern perimeters, along with potential encroachments into the fringing bush land because the former areas display lower levels of historical disturbance than other built form zones within the study area and that may be only superficial and preserve buried sandstone surfaces and soils, and the landforms and vegetation in the latter areas have not been significantly modified by any previous development.

Desktop assessment and visual inspection to identify if Aboriginal objects present (and if an AHIP is required)

No Aboriginal sites or objects have been previously identified within Manly Hospital, and none have been located by the current study. However, it is not expected that Aboriginal sites or objects exist or survive beneath the footprints of the majority of the buildings on the site. In most locations across the hospital grounds there exists either no potential for Aboriginal archaeological evidence to survive because of previous land preparation and building construction activity. However, in the fringing bus land and beneath existing car parking spaces here exists a low probability that engraved sandstone surfaces and possibly out-of-context Aboriginal objects to occur that may be affected by future works.

Further investigations and impact assessment

The Manly Hospital study area forms part of a sensitive Aboriginal heritage landscape that has a strong Aboriginal history and a considerable number of Aboriginal archaeological sites recorded in the local landscape. However, excluding the southern and southeastern car parking areas, adjacent landscaped strips, and bordering bush land, the majority of the land has been widely and extensively modified by past construction activities and retains limited potential to contain/retain any evidence for past Aboriginal visitation and use of the place.

Future heritage assessment actions that can be implemented to better evaluate the potential archaeological sensitivity of these areas could include the completion of geotechnical investigations of the subsurface conditions beneath the car parking slabs and adjacent road pavement and landscaped zones to determine

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whether in situ topsoil deposit over sandstone bedrock profiles are preserved. Targeted inspection and heritage impact assessment undertaken with the MLALC at a site specific level when plans that may involve development or significant change to the existing conditions in these bush land areas are confirmed may also be effective when final reuse options for the place are confirmed.

4.5 Conclusions

On the basis of the above considerations, no clear or obvious Aboriginal heritage constraints have been identified to exist at Manly Hospital, although the Aboriginal historical, archaeological and cultural heritage sensitivity of the landscape at Manly of which the hospital forms a part is well recognised. The original sandstone topography and terrain of the ridge top and side slope landforms contained within the central core of the study area in particular has been widely and extensively modified and buildings with basements, extensive footings, and deep-cut excavations into bedrock for site preparation activities and construction have removed most original sandstone fabrics and soils.

However, the perimeter bush land has archaeological potential by virtue of its comparatively undisturbed nature although no specific areas of PAD have been identified by this study for this largely steep and sloping terrain. The car parking areas to the south and southeast of the site also retain relative archaeological potential until proven otherwise because they may have been filled rather then cut and filled and which may have sealed former sandstone surfaces and buried soils.

It is concluded that future reuse options for Manly Hospital is unlikely to have a significant adverse impact upon the Aboriginal archaeological or historical heritage values of the place and no clear or obvious Aboriginal heritage constraints are apparent for the land at this time. However, the perimeter bush land zones and also potentially the adjoining open space car parking and landscaped areas may retain remnant topsoil deposits and/or intact sandstone surfaces with the potential to contain Aboriginal objects and retain engravings.

4.5 Mitigation options

Mitigation options that could be implemented to further clarify whether future works may impact upon Aboriginal archaeological sites (engravings or grinding grooves) or objects (artefacts) include a) completion of (low impact) geotechnical investigation of subsurface conditions beneath the southern car parking areas and landscaped zones to identify if intact sandstone and soils are present/survive and on the basis of the results from which further heritage management approaches can be developed as appropriate according the findings of that investigation, and b) where future reuse options require encroachment into and disturbance of the existing conditions of the bush land, that the potential Aboriginal cultural heritage impacts be evaluated at a site specific level by the MLALC as part of future DA processes.

5.0 Management recommendations

5.1 Basis for recommendations

- Recognition of the statutory protection provided to Aboriginal 'objects' and 'places' under the National Parks and Wildlife Act of 1974 (as amended), where it is an offence to knowingly damage, deface or destroy Aboriginal sites or relics without the prior consent of the Director-General of the National Parks and Wildlife Service (NPWS) that now comprises an administration branch of the OEH.
- Recognition of the views and advice that has been provided for the project by the MLALC.

5.2 Recommendations

- There are no clear or obvious Aboriginal archaeological or historical heritage constraints apparent that
 would restrict the development of future reuse options for Manly Hospital. The majority of the land
 comprising the central built form core of the hospital has been extensively modified by building and
 retains low to no Aboriginal archaeological potential. However, the southern and southeastern car
 parking areas and their adjoining landscape zones and fringing bush land may retain and/or contain
 sandstone surfaces that may have been engraved and remnant topsoil that may contain Aboriginal
 objects. This probability is however considered to be comparatively limited.
- It is recommended that a (low impact) geotechnical investigation of subsurface conditions beneath the
 existing car parking and landscaped surfaces be undertaken to identify if intact sandstone and soils are
 present/survive, and the results be used establish appropriate subsequent heritage management
 approaches in the context of future developments.
- It is also recommended that where future reuse options entail disturbance of the existing conditions
 of the fringing bush land surrounding the main grounds that the potential Aboriginal cultural heritage
 impacts of the proposal be evaluated at a site specific level by the MLALC as part of future
 development application processes.
- As a general recommendation, in the (largely) unexpected circumstance that Aboriginal objects are exposed in the future, it is recommended that activities should temporarily cease and the OEH be contacted to advise on the appropriate course of action to allow the MLALC to record and collect the identified item(s).
- As a second general recommendation, if human burials or bones are exposed, standard stop-work
 procedures and protocols to contact appropriate authorities should be followed, and if suspected to
 be of Aboriginal origin, the OEH and the MLALC will also need to be notified of the discovery
 immediately.

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Appendix 1

MLALC Cultural Heritage Statement

Appendix 2

AHIMS Site Searches & Cards



AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : Manly Hospital Client Service ID : 327315

Date: 11 February 2018

Dominic Steele Archaeological Consulting

21 Macgregor Street CROYDON New South Wales 2132

Attention: Dominic Steele

Email: dsca@bigpond.net.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Datum :GDA. Zone : 56. Eastings : 341500 - 342500. Northings : 6257575 - 6258575 with a Buffer of 50 meters. conducted by Dominic Steele on 11 February. 2018.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

12 Aboriginal sites are recorded in or near the above location. 0 Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of
 practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the NSW Government Gazette (http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date.Location details are
 recorded as grid references and it is important to note that there may be errors or omissions in these
 recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

3 Marist Place, Parramatta NSW 2150 Locked Bag 5020 Parramatta NSW 2220 Tel: (02) 9585 6380 Fax: (02) 9873 8599 ABN 30 841 387 271 Email: ahims@environment.nsw.gov.au Web: www.environment.nsw.gov.au

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3/4190 63/5770. Sydney Head's 25,000 REGISTER COPT 540NEY : 1:250,000 - 4298-8230 Map Name SYPNEY SHEET UBD Directory ... 5. Site No. ... 45-6: 162..... 4. 2. 8. Air photo ref 9. Cadastral Parish. of. Manly. Gave..... 10. Land Status SXRNEY HARBOUR NAT. PARK 11. 45 - 6 - 1162Directions for site relocation (REFER ALSO TO NPWS 45-6-263) which is Directly above this site! 12. UNDER A DETACHED BOULDER AT THE BASE OF AN OUTCROP OF SANDSTONE IN PARK HILL RESERVE, NORTH HEAD (Now part of SYDNEY HARBOUR NATIONAL PARK) Follow path that leads to Collins Beach, Spring Cove from the COMMONWEALTH Police TRAINING BARRACKS AND UPON REACHING THE FIRST CREEK Follow it Upstream for approx. 150 yards outcrop will be visible on your left side. 13. Owner .SYRNEY. HARBOUR 14. Tenant/Manager Address . NATIONL .. PARK Address Greyclitte House Attitude . Co- operative Attitude 15. Site Description 2. White hand stencils originally recorded but only I hand stencil is clearly visible now. A curiously Shaped small cave Fa. NW Floor soil no accupation. Height 2ths " Depth 12^{Ft} Width 4^{Ft} Both Hands where Left. 16. Reasons for investigation SURVEY. OF. SYDNEY METROPOLITAN AREA Nandalism 18. Interpretation 19 Visitation . Very Slight 20. Recommendations .. Educational Value.....

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21. Environmental description of site locality
22. Relation to other sites in locality DIRECTLY ABOVE THIS SITE
IS A GROUP OF ROCK ENGRAVINGS DONE BY ROGEMARY TAPLIN THESE ARE NOT ABORIGINAL NEVERTHELESS IT IS AN INTERESTIC GITE (NPWS 45-6-263) CAT NO. 0101 Guider
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SITE POSITION & ENVIRONMENT OFFICE USE ONLY: NPWS sile no: 1. Land form a (beachy hill slope/ridge top, etc: b. site aspect: South c. slope: d. mark on diagram provided or on your own sketch the position of the site: e. Describe briefly: shelter in diff immediately adjacent sandy beach flat. g. Land use/effect: National Park Conservation 1. LOCALTOCK TYPE: Hankesbury Sondstone 2. Distance from drinking water: Source 3. Resource Zone associated with site (estuanne, riverine, forest etc): , Coastal 4. Vegetation: 5. Edible plants noted: usual sydney communities Faunal resources (include shellfish): 7. Other exploitable resources (river pebblas, ochre, etc): Site type: DESCRIPTION OF SITE & CONTENTS. Note state of preservation of site & contents. Do NOT dig.disturb.damage site or contents. Shelter # P.A.D. This shelter was recorded by Rick Shapter, 2005, as midden. CHECKLIST TO HELP: No midden deposit located during inspection by Aboriginal Heitzy Office in 2007. The floor does have some potential schoolging length, width, depth. height of site, shelter, deposil, structure, element eg. tree scar, prooves in rock. deposit so the site cord is being sub mitted. refer attached. Phil Hunt Aug 2007 DEPOSIT: colour. texture, estimated depth, stratigraphy, contents-shell, borie, stone, charcoal, density & distribution of these. ne types, artelact hypes. ART area of surface decorated, motifs, colours, wel, dry pigment, technique of engraving, no. of ligures, sizes, patination. BURIALS: number & condition of bone. position, age, sex, essociated artelacts. TREES: number, abve. dead, likely age, scar shape, position, size, pallerns, and marks, regrowth QUARRIES. rock type. cebra, recognisable artefacts, percentage quarned. OTHER SITES EG. OTHER STICS EG. structures (lish traps, stone arrangements, bora rings, ma mas), mythological sites, rock holes, engraved groove channels, contact sites Attach sketches etc. eg. plan & section of shelter, show relation between site contents, missions massacres elenes) as indicate north, show scale. Attach annotated photos (stereo where useful) showing scale, particularly for art sites. appropriate

	North Head
ABORIGINA	L HERITAGE SITE RE-RECORDING FORM
	SITE: NorthHead-001
NPWS SITE NO: SITE NAME: SITE TYPE:	45-6-2849 (new site) Willemarrin Reserve, NorthHead-001 Rock Shelter.
AMG Grid Reference: AMG recorded by GPS (taken town	rds beach for more satellites).
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Box Star	1967, Hurstville NSW 2220. Te ndard Site Recording For	el: (02) 9585 6444 M Revised 5/88		
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	North Head
ABORIGINA	L HERITAGE SITE RE-RECORDING FORM SITE: NorthHead-002
NPWS SITE NO: SITE NAME: SITE TYPE:	45-6-2850 (new site) Collins Beach Obelisk Engraving Engraving.
AMG Grid Reference:	
3 4 1 8 2 0	mE
6 2 5 7 5 7	0 mN
LOCATION: Site is a	t southern end of Collins Flat (accessed by car park at end of
Collins Beach Rd). Fol beach. It is on top of a sits (this is probably th the site card, comment	It southern end of Collins Flat (accessed by car park at end of llow formal path to beach. Site is to about 15m east before the a very prominent rectangular boulder, where a concrete obelisk he replacement of the original sandstone obelisk mentioned in lorating Governor Philip's spearing by a group of Aboriginal long). A fish engraving should be about 2m south of the
Collins Beach Rd). Fol beach. It is on top of a sits (this is probably th the site card, commen men, including Bennel	llow formal path to beach. Site is to about 15m east before the very prominent rectangular boulder, where a concrete obelisk replacement of the original sandstone obelisk mentioned in torating Governor Philip's spearing by a group of Aboriginal

NorthHead-002 (45-6-2850)

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