

IDENTIFYING HISTORICAL ARCHAEOLOGICAL POTENTIAL

BUMBORA POINT, PORT BOTANY NSW

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SH1324
DRAFT
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URBIS

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EXECUTIVE SUMMARY

Urbis has been engaged by the Southern Metropolitan Cemeteries Trust (the Proponent) to prepare a preliminary historic archaeological assessment for a Planning Proposal for proposed works at the existing cemetery at Bumbora Point, NSW (hereafter referred as the 'subject area').

This Identifying Historic Archaeological Potential (IHAP) report was prepared to investigate the potential of any relics as identified under the *Heritage Act 1977 No 136* (Heritage Act) that may exist within the subject area.

The subject area is located within the C5 Botany Bay National Park (Botany Bay National Park, La Perouse Headland, Yarra Bay and Frenchmans Bay) Heritage Conservation Area (HCA), a conservation area of local significance, and state heritage significance in parts. The subject area also adjoins two listed heritage items, being;

- Item 245: Yarra Bay Beach and Reserve – local heritage significance; and,
- Item 246: Chinese Market Gardens – state heritage significance.

The IHAP has concluded the following:

- The subject area has been the subject of various activities and development since the early colonial occupation.
- Major developments included the establishment of a Battery Reserve and the construction of various infrastructure for the Bunnerong Power Station.
- There is moderate to high potential for above and below surface archaeological remains in the form of works and associated relics.
- The presence or absence of any works or relics should be the subject of a detailed Archaeological Assessment (AA).
- Should any historical archaeological potential identified, the significance of any works and/or relics should be assessed as part of the AA.

Based on the above conclusions, Urbis provides the following recommendations:

- An Archaeological Assessment should be carried out in line with the relevant guidelines under the Heritage Act 1977 including the NSW Heritage Manual '*Archaeological Assessments*' (1996) and '*Assessing Significance for Historical Archaeological Sites and Relics*' (2009). The preparation of the required assessments will include the following scope:
 - Updated assessment of archaeological potential;
 - Assessment of archaeological heritage significance against the NSW Heritage Criteria;
 - The criteria upon which current significance assessment is based are as follows:
 - Criterion (a) an item is important in the course, or pattern, of NSW's cultural or natural history (or the local area);
 - Criterion (b) an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the local area);
 - Criterion (c) an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area);
 - Criterion (d) an item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons (or the local area);
 - Criterion (e) an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the local area);
 - Criterion (f) an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the local area); and

- Criterion (g) an item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or cultural or natural environments (or the local area).
 - Detailed archaeological site survey should be carried out to confirm the presence of any above surface archaeological items and investigate the sub-surface potential for any relics;
 - Discussion of comparative archaeological sites, including adjacent sites and results;
 - Discussion of development impacts and mitigation strategies;
 - Archaeological methodology for fieldwork and post-excavation analysis; and
 - Research questions for the archaeological investigation.
- Based on the results of the AA and additional site survey, an application for an archaeological excavation permit might be required to further investigate the nature, extent and significance of any identified archaeological relics.

1. INTRODUCTION

1.1. OBJECTIVES

The objectives of this Identifying Historic Archaeological Potential (IHAP) included:

- Review of the background research undertaken for the Heritage Impact Statement (HIS) by Urbis (Urbis 2018) in relation to identifying archaeological potential.
- Review of historical aerial photographs of the subject area to identify any visible structures.
- Short, desktop-based evaluation of all available information including previously carried out archaeological investigations for both Aboriginal and historic heritage within the vicinity of the subject area.
- Summarising all available information and providing recommendations.

1.2. SITE LOCATION AND DESCRIPTION

The site is known as Bumbora Point and is located at Bumborah Point Road, Port Botany. The site is legally described as Lot 4858 in DP 752015, part of Lot 7302 in DP 1139143 and part of the Military Road Reserve (unknown Lot and DP) (Figure 1). The site is located within the Randwick Local Government Area, within the eastern suburbs of the Sydney Metropolitan Area. The site is located approximately 12 kilometres by direct line from the Sydney Central Business District (CBD).

The subject area is a generally undeveloped and vegetated area of the Botany Bay foreshore. The original topography and promontory form of the subject area was degraded and obscured through the creation of the Port Botany wharves with land reclamation in the 1970s. The subject area now provides a physical link between the Eastern Suburbs Memorial Park to the north, and the Port Botany wharves to the west.

Vehicular and pedestrian access is provided from Military Road. An existing driveway provides access to a small carpark with 20 car spaces and bitumen path leading to Yarra Beach. The majority of the subject area is currently inaccessible due to thick vegetation and the poor condition of informal dirt tracks.

There are no built structures on the site, however there are a number of concrete blocks and remnant building materials. The site is generally vegetated by low density shrubs and grasses.

Along the southern periphery of the site is the Botany Bay foreshore, with a sandy beach and sandstone cliffs. A former tunnel opening is located on the southern side of the site, opening to the bay. The mouth of the tunnel has been backfilled with concrete and sandstone to block physical access. Concrete reinforcement has been constructed around the mouth of the opening in the sandstone bedrock, and there are remnant concrete arms extending south into the water to funnel water. Evidence of the tunnel infrastructure is also evident in the grooves of the sandstone within the water.

1.3. PROPOSED DEVELOPMENT

Urbis has been engaged by the Southern Metropolitan Cemeteries Trust to prepare a preliminary historic archaeological assessment to identify archaeological constraints within the subject area. This Identifying Historic Archaeological Potential (IHAP) has been prepared to accompany a Planning Proposal for the subject area. The Planning Proposal seeks to include “cemetery” as an additional permitted use on the site to facilitate the expansion of the Eastern Suburbs Memorial Park (ESMP) which is located directly adjacent to the site to the north east.

A Concept Landscape Masterplan has been prepared for the site by Matthew Higginson Landscape Architecture, which provides an indication of the scale and form of development which would be facilitated by the Planning Proposal (Figure 2).

Figure 1 - Locality map with subject site shown outlined in red



Source: SIX Maps, 2018

Figure 2 - Concept Landscape Masterplan (with insert showing the proposed 20-metre buffer zone)



Source: Matthew Higginson Landscape Architecture, 2018 CP101 Issue A(2)

1.4. AUTHOR IDENTIFICATION

The following report has been prepared by Andrew Crisp (Senior Archaeologist) and reviewed by Balazs Hansel (Associate Director, Archaeology)

1.5. LIMITATIONS

This IHAP was prepared as a preliminary desktop assessment and it is limited to providing high-level assessment of historic archaeological constraints that may exist in relation to the subject area. No archaeological site inspection, detailed archaeological background research, significance assessment of any identified historic archaeological items, works or relics is included in this IHAP.

2. STATUTORY FRAMEWORK

2.1. HERITAGE ACT 1977 NO. 136

The *Heritage Act 1977* (Heritage Act) is the primary State legislative instrument affording protection to items of environmental heritage (natural and cultural) in NSW. The Heritage Act is designed to protect both listed heritage items, such as standing structures, and potential archaeological remains or relics.

Under the Heritage Act items of 'environmental heritage' include places, buildings, works, relics, moveable objects and precincts identified as significant based on historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic values. State significant items are listed on the NSW State Heritage Register (SHR) and are given automatic protection under the Heritage Act against any activities that may damage or affect their heritage significance. The SHR was established under Section 22 of the Heritage Act and is a statutory list of places and objects of importance to the people of NSW, including archaeological sites.

Under the Heritage Act, an application needs to be made to the Heritage Council in the event that it is proposed to disturb or excavate any land in NSW that is likely to contain archaeological remains.

Archaeological features and deposits are afforded statutory protection by the 'relics provision'. Section 4(1) of the Heritage Act (as amended 2009) defines 'relic' as follows:

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.

Section 139 to 146 of the Heritage 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 Heritage Act). In addition, Section 139[1] of the Act states that:

A person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.

In such cases, an excavation permit under section 140 is required. The Heritage Council can, under Section 139(4) of the Heritage Act, also grant an exception in certain circumstances from the need for a permit. Note that no formal listing is required for archaeological relics; they are automatically protected if they are of local or state significance.

A s146 Notification is required when a person has discovered or located a relic, even when a permit has already been issued.

2.2. RANDWICK LOCAL ENVIRONMENTAL PLAN 2012

The Randwick Local Environmental Plan 2012 (Randwick LEP) is also relevant in relation to the control of development with regards to heritage within the subject area and surrounds. In relation to heritage, the LEP's objectives are to conserve the heritage of the region through the protection of the significance of heritage items, conservation areas, archaeological sites and Aboriginal places of significance. Schedule 5 of the LEP identifies places of heritage significance within the Randwick LGA.

3. HERITAGE LISTINGS

This section has drawn information from the Heritage Impact Statement (HIS) prepared by Urbis in July 2018 (Urbis 2018).

3.1. STATUTORY AND NON-STATUTORY HERITAGE SEARCHES

3.1.1. Randwick Local Environmental Plan (LEP) 2012

The Randwick Local Environmental Plan (LEP) 2012 identifies heritage items and archaeological sites of local heritage significance.

A search of the Randwick LEP 2012 was completed on 22 May 2019. The subject area is located within the “C5 Botany Bay National Park (Botany Bay National Park, La Perouse Headland, Yarra Bay and Frenchmans Bay) Heritage Conservation Area” (HCA), a conservation area of local significance, and state heritage significance in parts. The subject area is adjacent to two listed heritage items and one conservation area, being;

- Item 245: Yarra Bay Beach and Reserve – local heritage significance;
- Item 246: Chinese Market Gardens – state heritage significance; and
- C8 Bunnerong Power Station – local heritage significance.

3.1.2. Randwick City Council Development Control Plan (DCP) 2013

A review of the Randwick City Council DCP 2013 was completed on 14 August 2019.

Section B2 1.6 ‘Archaeological sites’ states:

Archaeological sites provide physical evidence of the past and can include objects and artefacts from the lives of previous generations, such as tools and household items, as well as remains of early buildings and structures.

A number of archaeological sites are listed in Schedule 5 of the RLEP. Archaeological sites or relics that have local or state significance are protected under the NSW Heritage Act 1977.

Development consent is required for disturbing or excavating an archaeological site while knowing or suspecting that the work may result in a relic being discovered, exposed, moved, damaged or destroyed. Council may request an archaeological assessment to confirm the likelihood and potential significance of relics on the site and recommend appropriate action in the context of the proposed development.

When intending to disturb or excavate land where such archaeological relics have been identified or are considered likely to occur, it is the responsibility of the property owner to seek relevant approvals, including an excavation permit or an exception under section 139 and section 140 of the Heritage Act 1977.

RLEP Clause 5.10(7) Archaeological Sites outlines consultation requirements with respect to carrying out development on an archaeological site.

Section B2 1.8.2 ‘Development requiring consent’ states:

A DA is required for the carrying out of development which relates to a heritage item, development in a heritage conservation area, Aboriginal place of heritage significance or archaeological site (unless it falls into the minor development categories outlined in Section 5.1).

Section B2 1.12 ‘Development in the vicinity of heritage items and heritage conservation areas’:

All new development adjacent to or in the vicinity of a heritage item or heritage conservation area needs to be considered for its likely effect on heritage significance and setting.

Applicants should address in their Statement of Environmental Effects any potential impacts of the development on a heritage item or heritage conservation area and measures to minimise this impact, with reference to Part 12 of this section of the DCP and the relevant statement of heritage significance.

4. HISTORICAL OVERVIEW

4.1. EARLY SITE HISTORY

Early parish maps and records suggest that the subject site formed part of a wider Government Reserve throughout the nineteenth century and remained generally undeveloped as a natural promontory along the northern shore of Botany Bay. This Government Reserve included the whole of the peninsula, including those areas now known as Little Bay and La Perouse.



Figure 3 – Botany Parish Map (undated) showing early grants and government reserves. The subject site originally formed part of the Government Reserve of 1,640 acres. John Brown's land, on which the Bunnerong Power Station would later be constructed, is visible to the north west. The approximate location of the subject site circled in red.

Source: NSW Land Registry Services, A.O Map 191



Figure 4 – A further Botany Parish Map (undated) showing early grants and government reserves. The subject site originally formed part of the Government Reserve of 1,640 acres. John Brown's land, on which the Bunnerong Power Station would later be constructed, is visible to the north west. The approximate location of the subject site circled in red.

Source: NSW Land Registry Services, A.O Map 32537

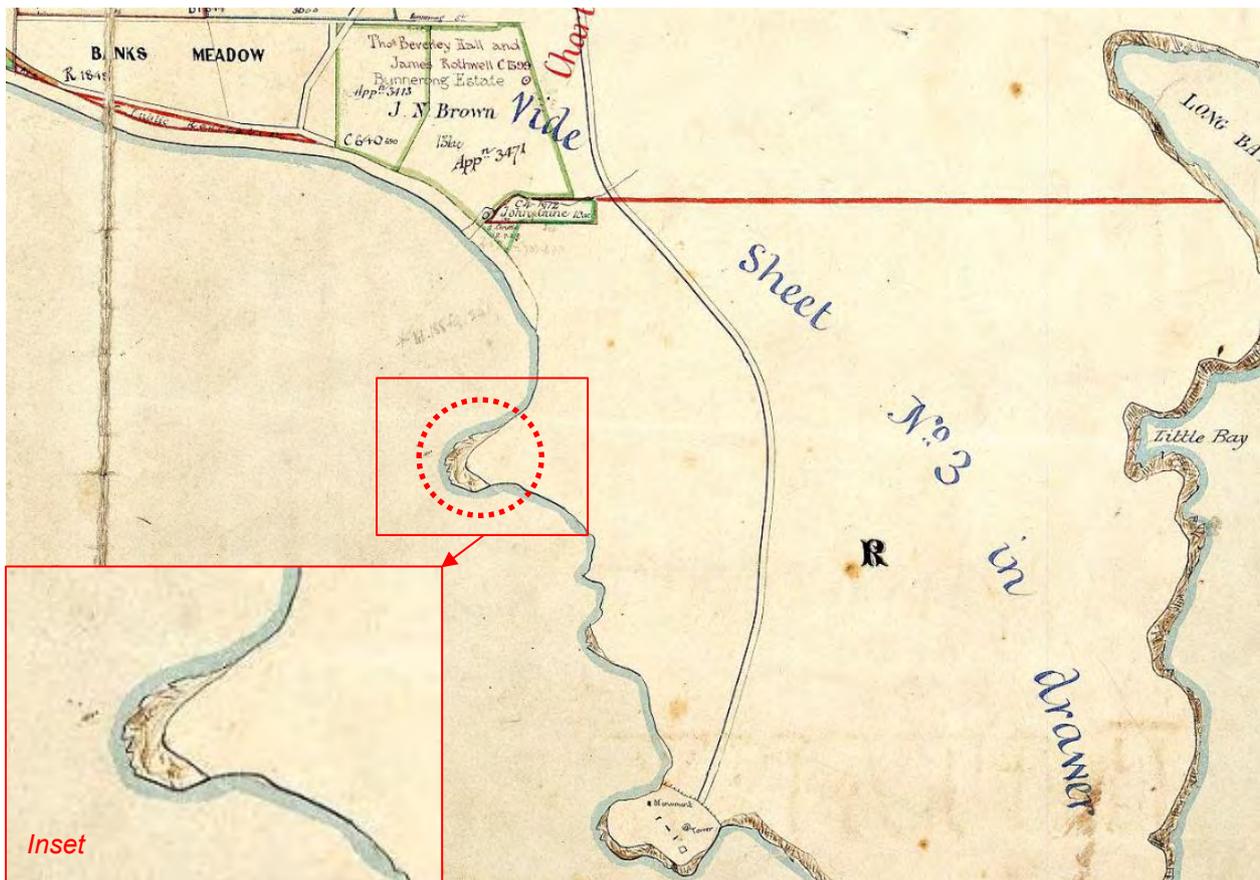


Figure 5 – Botany Bay Parish Map c. 1867. The approximate location of the subject site circled in red.

Source: NSW Land Registry Services

4.2. BUMBORAH POINT – BATTERY RESERVE

An area of approximately '8 acres, 3 roods, 5 perches' was 'dedicated 25th October 1892 for defence purposes at *Bumborah Point*'¹. The subject area was identified as 'Bumborah Point', a different spelling to the present name of 'Bumbora Point' and was already noted on Parish maps as a 'Battery Reserve' as early as 1886 (Figure 6). None of the available records provide evidence of any associated defence structures or buildings being constructed thereon at this time. Other land along the coastline, including Bare Island and around La Perouse, was actively developed for defence purposes (refer above to the c.1867 map at Figure 5 which shows Bare Island's structures at this time).

The adjoining Eastern Suburbs Memorial Park (cemetery) was established soon thereafter, with the land being dedicated for the cemetery use in 1888 and the first interment occurring in 1893.²

By 1920, the Government appeared to have no functional use for the subject 'battery reserve' site and put out an open tender inviting offers to lease the whole of the land for a term of five years, before access to the site was needed again for the construction of the new Bunnerong Power Station salt water inlet tunnel (which occurred in c.1929 – refer to Section 4.3 below).³

¹ Government Gazette of the state of New South Wales (Sydney, NSW: 1901-2001), Friday 9 May 1969

² Eastern Suburbs Memorial Pak website, Our History page, accessed 13 April 2018 at <https://easternsuburbsmemorialpark.worldsecursystems.com/our-history>

³ 1920 'Advertising', The Sydney Morning Herald (NSW: 1842 - 1954), 24 July, p. 4. , viewed 26 Aug 2019, <http://nla.gov.au/nla.news-article15898971>



Figure 6 – Botany Parish Map 1886, showing the subject site as ‘Bumborah Point’, a Battery Reserve, and the adjoining dedicated cemetery. The approximate location of the subject site circled in red.

Source: NSW Land Registry Services

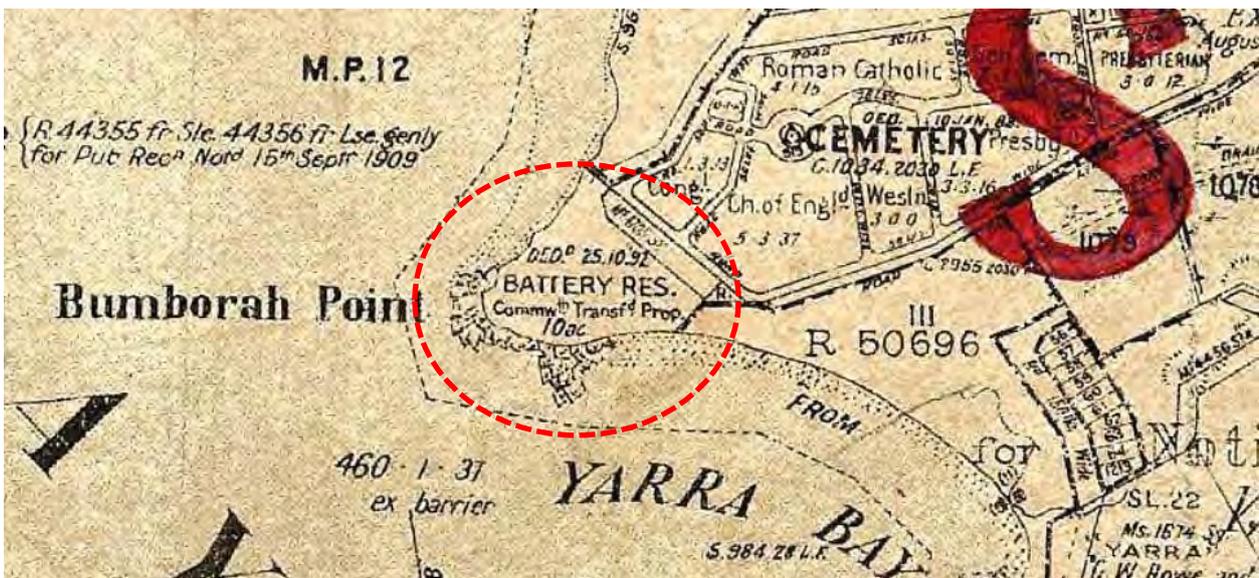


Figure 7 – Botany Parish Map 1905. The approximate location of the subject site circled in red.

Source: NSW Land Registry Services

4.3. THE BUNNERONG POWER STATION

Between 1925 and 1929, the Bunnerong Power Station, designed by Henry Eli White, was constructed to the north west of the subject area. The Power Station was commissioned by the then Sydney Municipal Council and was the second power station after Pyrmont to be built by the Sydney Municipal Council.

The Power Station produced electricity by burning coal and the Power Station’s cooling system used sea water from Botany Bay funnelled through tunnels from Bay. The Power Station required a supply of water for cooling of the condensers, and the location of the inlet tunnel for water sourcing was to be located within the subject site.

A tunnel inlet, with associated concrete funnelling infrastructure, was constructed to the southern face of the shoreline of the subject site, with the tunnel extending through the site. Water was drawn into the tunnel

system at the subject site and passed underground through to the Power Station to the north, before dispelling back into Botany Bay via an outlet tunnel to the north west. The subject site was chosen for the inlet tunnel “partly to get an inlet in rock, and partly because it is desirable to keep the inlet well away from the outlet [which is located further to the north west] by which the warm water from the condenser re-enters the bay”.⁴

The infrastructure for the inlet tunnel comprised of two concrete arms extending south from a man-made tunnel in the rockface of the subject area. A concrete retaining wall formed the opening for the tunnel. A large area of sand was removed to allow for the water to enter the tunnel. The construction technique used for the subterranean tunnel has not been determined through this investigation. It is surmised that the tunnel was not constructed using trenching from the surface due to the lack of surface disturbance visible in aerial imagery from the 1930s.



Figure 8 - Bunnerong Power Station, under construction, c.1925-29. The subject site is indicated by the red arrow.

Source: City of Sydney Council, ArchivePix, NCSA CRS 43: 1930 p224



Figure 9 – View of the subject site in the interwar period (potentially late 1920s / early 1930s) with the site indicated by the red arrow. Structures associated with the Bunnerong Power Station inlet tunnel are visible (tunnel arm to the left and associated structures above).

Source: La Perouse Museum, accessed online at <https://laperousemuseum.files.wordpress.com/2019/07/d94812d4-d094-45fc-9221-3a732a209ba7.jpeg>

⁴ 1929 'EASTERN SUBURBS BRANCH', Construction and Local Government Journal (Sydney, NSW: 1913 - 1930), 30 January, p. 14. , viewed 26 Aug 2019, <http://nla.gov.au/nla.news-article109639424>

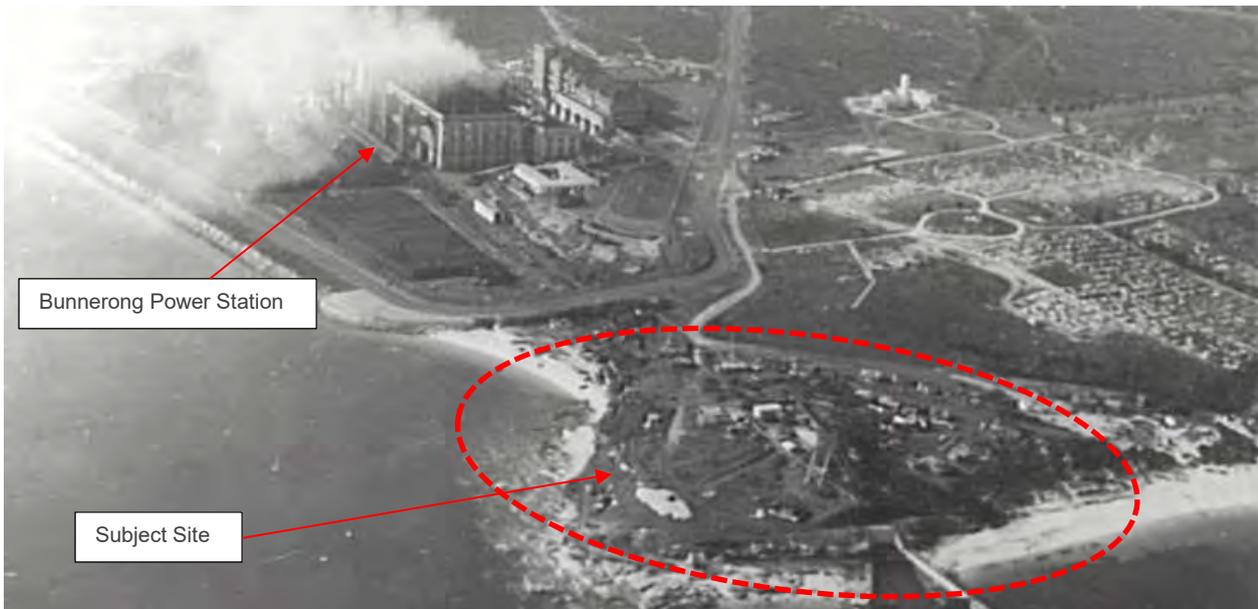


Figure 10 - Aerial view during the interwar period (potentially late 1920s / early 1930s). Structures associated with the Bunnerong Power Station inlet tunnel are visible (tunnel arm to the south and associated structures above).

Source: City of Sydney ArchivePix 036/036967



Figure 11 - Bunnerong Power Station, Matraville, New South Wales, ca. 1930

Source: <http://nla.gov.au/nla.obj-162108670>

Following the completion of the Bunnerong Power Station salt water inlet tunnel construction at the subject site in c.1929, the Government once again advertised in 1933 and 1934 for potential new lessees for the land, having no alternate use for the place. This time, the subject site was offered up on a 20-year lease.⁵ It appears that the Government's offer for lease of the site was not taken up. By the outbreak of WWII in 1939, the subject site had been illegally occupied with a number of shacks having been erected in the 1930s. The Military ordered the evacuation of these 'shacks' in 1939, presumably to prepare the site for defence purposes in view of the emerging war.⁶

⁵ 1933 'Advertising', The Daily Telegraph (Sydney, NSW : 1931 - 1954), 29 May, p. 11. , viewed 26 Aug 2019, <http://nla.gov.au/nla.news-article246230942> & 1934 'Advertising', The Daily Telegraph (Sydney, NSW : 1931 - 1954), 9 June, p. 12. , viewed 26 Aug 2019, <http://nla.gov.au/nla.news-article246428518>

⁶ 1939 'MILITARY ORDERS SHACKS EVACUATED', The Daily Telegraph (Sydney, NSW : 1931 - 1954), 16 September, p. 5. , viewed 26 Aug 2019, <http://nla.gov.au/nla.news-article247814858>



Figure 12 – Aerial view of the subject site looking south east, during the late interwar period (potentially late 1930s / early 1940s) entitled “Milton Kent aerial views of Balmain, Bunnerong, Mascot, Rhodes, Surry Hills, Waterloo”

Source: State Library of NSW, Reference Code 1017331



Figure 13 – Extract of the 1943 historical aerial of the subject site, showing the Bunnerong Power Plant and indicating the inlet tunnel (subject site) and outlet tunnel further to the north

Source: SIX Maps 2019

The demise of the Bunnerong Power Station was primarily brought about by the introduction of new, larger power stations at Lake Macquarie in the 1950s. These stations were built closer to the sources of coal and could produce as much as five times the amount of energy as Bunnerong. Additionally, residents increasingly complained about the pollution and noise generated by the station. Bunnerong was used as a stand-by for emergency use only from the 1950's up until its closure in 1973.

Demolition of the power plant began in 1979 with major demolition following in 1986-1987, including the station's 112-metre concrete chimney stack. The presence of asbestos in the building and criticism made in Randwick Council meetings of the storage of dangerous chemicals on the power station site delayed demolition during 1987. In March 1994, the five-storey Bunnerong Switching Station or sub-station was also demolished.⁷



Figure 14 – Extract of the 1943 historical aerial of the subject site (outlined in red)

Source: *SIX Maps 2019*

4.4. THE SUBJECT SITE POST WWII

By the 1950s, 1960s and 1970s most of the small structures visible within the 1940s' aerials had been demolished. The only extant structure on the headland within the subject area by 1970 is a small standing structure (possibly a vent or beacon of some kind) enclosed with a squared fence/wall.

In 1961, the subject site was identified along with a number of other redundant military holdings for 'release'. The press release for this action cited the holdings as being "no longer required" by the Army. The land was 'released' under the condition of "demolishing and filling in old Army installations on the land [referring to the collective sites], and the guarantee of the right of public access at all times".⁸ This land release was supported by the local Randwick Council and its Aldermen, and the Military was actively criticised by Randwick Council for "failure to release a reasonable portion of land" in relation to its wider land holdings throughout the LGA.⁹

⁷ Randwick City Council, archived website from 4 April 2012, accessed 12 April 2018 at: https://web.archive.org/web/20120404120636/http://www.randwick.nsw.gov.au/About_Randwick/Heritage/A_to_Z_of_people_and_places/Bunnerong_Power_Station/indexdl_103.aspx

⁸ Parliament of Australia, Press Release No. 2896, December 13 1961, "Army to release more land"

⁹ 1962 'In N.S. W. This Week W ave Of Young Seekers This Month Hits City And Country', *The Canberra Times* (ACT : 1926 - 1995), 3 January, p. 2. , viewed 26 Aug 2019, <http://nla.gov.au/nla.news-article105857917>

The formal revocation of the subject site's military purpose was gazetted in 1969 when the Minister for Lands declared that "the purpose of the dedication of the areas ... has failed" and "it is intended to revoke such [military] dedication with a view to reserving the land for Public Recreation".¹⁰



Figure 15 – Close up extract of the 1951 historical aerial of the subject site

Source: *NSW Land and Property Information*



Figure 16 – Close up extract of the 1961 historical aerial of the subject site

Source: *NSW Land and Property Information*

¹⁰ 1969 'PROPOSED REVOCATION OF DEDICATION', Government Gazette of the State of New South Wales (Sydney, NSW : 1901 - 2001), 9 May, p. 1724. , viewed 26 Aug 2019, <http://nla.gov.au/nla.news-article219994097>



Figure 17 – Close up extract of the 1970 historical aerial of the subject site

Source: *NSW Land and Property Information*

The 1970s and 1980s saw the development of the area to the immediate north west of the subject site for the Botany Bay port and industrial area. This included the construction of island breakwaters and the reclamation of land to provide 13,000 linear feet of wharves and 1,000 acres for industrial use.¹¹ This work would change the immediate topography of the subject site, changing it from a promontory to simply an area of a coastline.

¹¹ 1969 'CHANGING CITIES \$75m port scheme for Botany Bay', *The Canberra Times* (ACT: 1926 - 1995), 19 March, p. 3., viewed 26 Aug 2019, <http://nla.gov.au/nla.news-article107083979>



Figure 18 - Showing Brotherson Dock, container terminals, Bunnerong Power Station, Botany Rd and ANZAC Parade, 1983. The subject site is indicated by the red arrow.

Source: City of Sydney Council, ArchivePix, SRC2247

4.5. SUMMARY TIMELINE FOR THE SUBJECT SITE

Based on the above historic analysis, the following summary timeline can be applied to the subject site:

Table 1 – Historical timeline for the subject site

Date	Event / Action
By 1886	The subject site is identified as a Battery Reserve, however there is no evidence that any defence structures were built on the site at this time.
1892	'8 acres, 3 roods, 5 perches' was 'dedicated 25th October 1892 for defence purposes at Bumborah Point'.
1920	Not being occupied for defence purposes, the subject site was offered for a 5-year lease.
1925-1929	The salt water inlet tunnel for the Bunnerong Power Station was constructed underneath the subject site.
1930s	Subject site illegally occupied with a number of shacks. The Military ordered the evacuation of these 'shacks' in 1939. Not being occupied for defence purposes, the subject site was offered for a 20-year lease.
1943	The aerial photograph undertaken this year does not identify any obvious or significant defence structures on the site.
1961	The subject site was identified along with a number of other redundant military holdings for 'release'. The aerial photograph undertaken this year does not identify any obvious or significant defence structures on the site.

Date	Event / Action
1969	Formal revocation of the site's defence use. The Minister declared that "the purpose of the dedication of the areas ... has failed" and "it is intended to revoke such [military] dedication with a view to reserving the land for Public Recreation". ¹²
1970	The aerial photograph undertaken this year does not identify any obvious or significant defence structures on the site, and the site appears to have been substantially cleared.
1970s-1980s	Construction of Port Botany to the immediate west of the subject site causing the subject site to lose its topographical promontory form.

¹² 1969 'PROPOSED REVOCATION OF DEDICATION', Government Gazette of the State of New South Wales (Sydney, NSW: 1901 - 2001), 9 May, p. 1724., viewed 26 Aug 2019, <http://nla.gov.au/nla.news-article219994097>

5. PHYSICAL ANALYSIS POTENTIAL STRUCTURES

5.1.1. Analysis of Known Structures on the Subject Site

Analysis of historical aerials and review of the historical suggests that over time a number of structures were located on the subject site. Whilst the subject site was reserved for a battery since the late nineteenth century, the number of times the site was offered for lease to the broader market by the Government suggests that the site was not continuously used or developed for military purposes. The historical record also suggests that the site was occupied illegally throughout the 1930s by shacks, which had to be cleared in 1939 at the outbreak of WWII.

It is likely that a large proportion of the structures that have been located across the site from time to time are associated with the Bunnerong Power Station inlet tunnel which was constructed through the site in the late 1920s, and not for defence purposes. For example, the following photograph from the interwar period (potentially late 1920s / early 1930s) shows a large structure above the inlet tunnel location which was probably used for pumping or water inlet control associated with the construction of the inlet tunnel (Figure 19). This structure is also evident in the aerial view of the site from the same period, which shows the same structure extant over the inlet tunnel, evidenced by the angled support beam structure (Figure 20).



Figure 19 – View of the subject site in the interwar period (potentially late 1920s / early 1930s) with the site indicated by the red arrow. Structures associated with the Bunnerong Power Station inlet tunnel are visible (tunnel arm to the left and associated structures above).

Source: La Perouse Museum, accessed online at <https://laperousemuseum.files.wordpress.com/2019/07/d94812d4-d094-45fc-9221-3a732a209ba7.jpeg>



Figure 20 - Aerial view during the interwar period (potentially late 1920s / early 1930s). Structures associated with the Bunnerong Power Station inlet tunnel are visible (tunnel arm to the south and associated structures above).

Source: City of Sydney ArchivePix 036/036967

Later aerial photographs show that this potential water pumping / inlet control structure was substantially removed in the late 1930s/early 1940s (Figure 21 and Figure 22), was only partially evident by 1961 (Figure 23), and was completely cleared by 1970 (Figure 24).



Figure 21 – Aerial view of the subject site looking south east, during the late interwar period (potentially late 1930s / early 1940s) entitled “Milton Kent aerial views of Balmain, Bunnerong, Mascot, Rhodes, Surry Hills, Waterloo”

Source: State Library of NSW, Reference Code 1017331



Figure 22 – Extract of the 1943 historical aerial of the subject site (outlined in red)
Source: *SIX Maps 2019*



Figure 23 – Close up extract of the 1961 historical aerial of the subject site
Source: *NSW Land and Property Information*



Figure 24 – Close up extract of the 1970 historical aerial of the subject site

Source: NSW Land and Property Information

5.1.2. Potential Defence Use Structures

Randwick Council have located photographs taken by Charles Abela, a local man, which are claimed to have been taken at Bumbora Point during the 1960s. These photographs suggest that former military structures were once located on the site. In assessing the potential heritage significance of the subject site, we have endeavoured to investigate the validity of these claims.



Figure 25 – Photograph by Charles Abela, claimed to be of military fortifications at Bumbora Point, undated (author of annotations unknown)

Source: Randwick City Council



Figure 26 – Photograph by Charles Abela, claimed to be of military fortifications at Bumbora Point, undated (author of annotations unknown)

Source: Randwick City Council

We have undertaken numerous site investigations and have not been able to ‘ground truth’ that these structures are located on the subject site. Urbis has undertaken extensive above ground and desktop research to investigate the potential for defence structures on the site, including review of Government archives, local studies research, and review of existing heritage assessments for military installations along the coastline. None of these investigations has provided definitive evidence supporting the proposition that

defence structures were constructed at the subject site, or that evidence of potential former structures remains. The subject site is not mentioned in the National Parks & Wildlife Service commissioned report by Paul Davies Pty Ltd in 2007 entitled *The NPWS Fortifications of Sydney Harbour and Botany Bay: A Strategic Plan*. Further analysis to establish the potential for remnant structures will be subject to a Historical Archaeological Assessment.

The Paul Davies Pty Ltd report does however include a recent photograph of a fortification at Bare Island, a known significant defence site located to the east of the subject site at La Perouse. This photograph is extremely similar to the photograph provided by Council which claims to be of a fortification at the subject site. Similarities between the two photographs suggest that they are in fact photographs of the same structure, including its proximity to the escarpment, and architectural details (circled below).



Figure 27 – Photograph of a fortification at Bare Island, 2007

Source: Davies Pty Ltd (2007), *The NPWS Fortifications of Sydney Harbour and Botany Bay: A Strategic Plan*, p.17

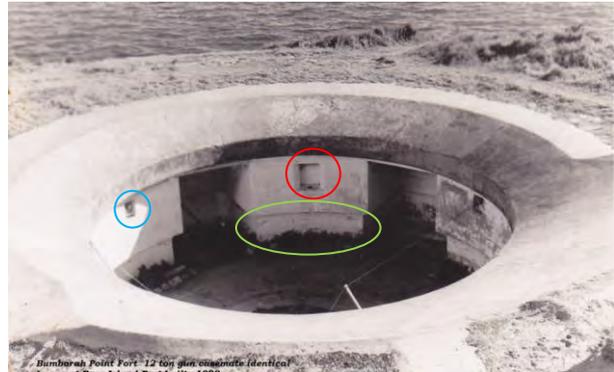


Figure 28 – Photograph by Charles Abela, claimed to be of military fortifications at Bumbora Point, undated (author of annotations unknown)

Source: Randwick City Council

Further, the fortification at Bare Island is clearly evident in the 1943 aerial, and a similar form is not evident at the subject site.



Figure 29 – Extract of 1943 historic aerial – Bare Island

Source: SIX Maps 2019



Figure 30 – Extract of 1943 historic aerial – subject site

Source: SIX Maps 2019

6. SITE INVESTIGATION

6.1. SURVEY

A site visit was undertaken on 13 November 2018 by two Urbis Heritage consultants. The whole of the subject area was traversed on foot as far as this was possible, given the dense and obstructive nature of existing vegetation. All foot tracks were walked and investigated.

No intact former military fortifications were identified. As previously detailed in Urbis’s Heritage Impact Statement for the Planning Proposal submission, remnants of a previous structure were identified across the site, consisting of brick and concrete portions, clearly derived from a former structure. These elements were scattered throughout the site with a predominance to the area circled red at Figure 31. Photographs of these elements are also included below in Figure 32 and Figure 33.



Figure 31 – Current aerial identifying general area of remnant fabric

Source: Nearmap 2018



Figure 32 – Photograph of remnant fabric

Source: Urbis



Figure 33 – Photograph of remnant fabric

Source: Urbis

The approximate location of this rubble has been mapped as close as possible on the following aerial. Areas which were unable to be traversed due to vegetation were not mapped, however it is acknowledged that this does not mean that evidence of former structures is not present in these areas.

The areas able to be traversed are shown in the following aerial as shaded red. The approximate locations of rubble and construction materials (bricks, concrete) are indicated with orange dots. These dots do not represent individual elements, but rather are indications of the approximate locations of building materials or clusters of materials.



Figure 34 – Aerial map

Source: SIX Maps 2019 with Urbis annotations

7. IDENTIFYING ARCHAEOLOGICAL POTENTIAL

This section presents an assessment of the potential for archaeological resources to be present within the subject area. Archaeological resources may exist 'in-situ' below or above ground, and also within the cavities of existing structures. Such resources have the potential to provide insight into the use and occupation of the site that is not identifiable through other resources.

7.1. ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL

Historical archaeological potential is defined as:

The degree of physical evidence present on an archaeological site, usually assessed on the basis of physical evaluation and historical research (Department of Urban Affairs and Planning 1996).

Archaeological research potential of a site is the extent to which further study of relics likely to be found is expected to contribute to improved knowledge about NSW history which is not demonstrated by other sites, archaeological resources or available historical evidence. The archaeological potential of the study area is assessed based on the background information presented in Section 4, and graded as per:

- **Nil Potential:** the land use history demonstrates that high levels of ground disturbance have occurred that would have completely destroyed any archaeological remains. Alternatively, archaeological excavation has already occurred, and removed any potential resource.
- **Low Potential:** the land use history suggests limited development or use, or there is likely to be quite high impacts in these areas, however deeper sub-surface features such as wells, cesspits and their artefact-bearing deposits may survive.
- **Moderate Potential:** the land use history suggests limited phases of low-moderate development intensity, or that there are impacts in this area. A variety of archaeological remains is likely to survive, including building footings and shallower remains, as well as deeper sub-surface features.
- **High Potential:** substantially intact archaeological deposits could survive in these areas.

The potential for archaeological relics to survive in a particular place is significantly affected by land use activities that may have caused ground disturbance. These processes include the physical development of the site (for example, phases of building construction) and the activities that occurred there. The following definitions are used to consider levels of disturbance:

- **Low Disturbance:** the area or feature has been subject to activities that may have had a minor effect on the integrity and survival of archaeological remains.
- **Moderate Disturbance:** the area or feature has been subject to activities that may have affected the integrity and survival of archaeological remains. Archaeological evidence may be present, however it may be disturbed.
- **High Disturbance:** the area or feature has been subject to activities that would have had a major effect on the integrity and survival of archaeological remains. Archaeological evidence may be greatly disturbed or destroyed.

Table 2 – Historical archaeological potential

Phase and Date	Potential Archaeological Resource	Integrity of Archaeological Evidence	Archaeological Potential
Early-mid 19 th Century land grants and subdivisions	Palynological evidence – pre-European vegetation; plantings; crops; etc	The historical background suggests the subject area was largely unimproved/undeveloped until the mid-1860s. The subject area has some potential for remnants of elements of structures associated with agricultural activities and animal grazing such as fence poles, discarded items. The integrity of those items can range from in-situ to highly disturbed context.	Low
Mid to late 19 th Century	Elements of any structures and relics associated with the Battery Reserve.	The establishment of the Battery Reserve suggest that the subject area has potential for structures to be present associated with military infrastructure that might had been built within the subject area. The presence or absence of those structures should be the subject of a more detailed historical search (where possible beyond what has already been undertaken) and additional site inspections to further investigate their nature, extent and significance.	Low to Moderate
Early to Late 20 th Century	In addition to the above, structures, works and potential relics associated with the Bunnerong Power Station.	The construction of the Bunnerong Power Station included the construction of the water tunnel inlet. Structures and works are still visible of this inlet and additional research and site inspection is needed to further investigate their nature, extent and significance.	Moderate to High

7.2. SUMMARY OF ARCHAEOLOGICAL POTENTIAL

The subject area has archaeological potential in association with:

- Aboriginal occupation and early colonial land use (Low potential)
- Battery Reserve and associated military use (Low to Moderate potential)
- The Bunnerong Power Station and associated infrastructure (Moderate to High potential)

The details, nature, extent and significance of the archaeological potential should be addressed by a detailed Archaeological Assessment and if necessary, an Archaeological Research Design needs to be developed for any invasive archaeological investigations and permit application.

8. CONCLUSION AND RECOMMENDATIONS

The IHAP has concluded the following:

- The subject area has been the subject of various activities and development since the early colonial occupation.
- Major developments included the establishment of a Battery Reserve and the construction of various infrastructure for the Bunnerong Power Station.
- There is moderate to high potential for above and below surface archaeological remains in the form of works and associated relics.
- The presence or absence of any works or relics should be the subject of a detailed Archaeological Assessment (AA).
- Should any historical archaeological potential identified, the significance of any works and/or relics should be assessed as part of the AA.

Based on the above conclusions, Urbis provides the following recommendations:

- An Archaeological Assessment should be carried out in line with the relevant guidelines under the Heritage Act 1977 including the *NSW Heritage Manual, 'Archaeological Assessments'* (1996) and *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009). The preparation of the required assessments will include the following scope:
 - Updated assessment of archaeological potential;
 - Assessment of archaeological heritage significance against the NSW Heritage Criteria;
 - The criteria upon which current significance assessment is based are as follows:
 - Criterion (a) an item is important in the course, or pattern, of NSW's cultural or natural history (or the local area);
 - Criterion (b) an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the local area);
 - Criterion (c) an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area);
 - Criterion (d) an item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons (or the local area);
 - Criterion (e) an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the local area);
 - Criterion (f) an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the local area); and
 - Criterion (g) an item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or cultural or natural environments (or the local area).
 - Detailed archaeological site survey should be carried out to confirm the presence of any above surface archaeological items and investigate the sub-surface potential for any relics;
 - Discussion of comparative archaeological sites, including adjacent sites and results;
 - Discussion of development impacts and mitigation strategies;
 - Archaeological methodology for fieldwork and post-excavation analysis; and
 - Research questions for the archaeological investigation.

- Based on the results of the AA and additional site survey, an application for an archaeological excavation permit might be required to further investigate the nature, extent and significance of any identified archaeological relics.

9. REFERENCES

Australia ICOMOS 1999, The Burra Charter: 2013 The Australia ICOMOS Charter for Places of Cultural Significance, Australia ICOMOS, Burwood.

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Heritage Office 2001, Assessing Heritage Significance, Heritage Office, Parramatta.

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