

La PEROUSE HEADLAND

Botany Bay National Park

CONSERVATION MANAGEMENT PLAN

STAGE 2 – Final Report [Volume 2 of 3]

August 2009

prepared by [Jill Sheppard Heritage Consultants](#)

for the NSW Department of Environment, Climate Change & Water

Parks & Wildlife Group

Sydney Region



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NOTE: Department of Environment, Climate Change & Water name changes

In August 2009 subsequent to the finalisation of this report, but before the report was printed, the name of the Department of Environment and Climate Change (DECC) was changed to the Department of Environment, Climate Change & Water (DECCW).

Within the DECCW the name of the Parks and Wildlife Group (PWG) was not changed. However, the Cultural Heritage Division (CHD) was also renamed and is now referred to as the Culture & Heritage Division (C&HD).

The cover and inside cover pages of this report have been changed to reflect the Departmental name change. However, within the body of the report the terminology referring to the Department of Environment, Climate Change & Water and its subdivisions remains in the pre-August 2009 nomenclature.

ISBN 978 1 74122 987 5

DECC 2008/524

La PEROUSE HEADLAND

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CONSERVATION MANAGEMENT PLAN

STAGE 2 – Final Report [Volume 2 of 3]

August 2009

See also Volume 1: La Perouse Headland – A Shared History

prepared by Dan Tuck, 2006 (amended 2008)

&

Volume 3: La Perouse Headland, Building and Site Inventory

prepared by [Jill Sheppard Heritage Consultants](#)

for the NSW Department of Environment, Climate Change & Water

Parks & Wildlife Group

Sydney Region

A companion volume underlying the findings of this report is:

La Perouse Headland CMP Community consultation and social values assessment Stage 2, Draft Report, July 2008 prepared by Context Pty Ltd

Cover includes photographs arranged by Dan Tuck and presented in the *La Perouse Headland – A Shared History* as well as photographs presented in this report.

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APPENDIX A: List of people who attended meetings and were consulted during this project

See also *Volume 3 - BUILDING & STRUCTURES INVENTORY*

- 01 Macquarie Watchtower**
- 02 Cable Station**
- 03 Battery Room**
- 04 Store Room**
- 05 Courtyard**
- 06 La Perouse Monument**
- 07 Pere Le Receveur Tomb**
- 08 Miscellaneous Items**
- 09 Bare Island Fort**
- 10 Landscape**

1.0 Introduction

1.1 This Stage 2 Report

This Stage of the preparation of a Conservation Management Plan (CMP) addresses the whole of the La Perouse Headland area of Botany Bay National Park including Bare Island, but excluding the Loop Road, which is managed by Randwick Council. The study area terminates at the retail/café edges north of the Anzac Parade loop and does not include the adjacent Congwong Bay or Frenchmans Bay areas.

The CMP incorporates the findings of the consultation program prepared concurrently by Context and presented in a Draft report on July 4th, 2008, titled ***La Perouse Headland CMP, Community consultation and social values assessment – Stage 2***. A list of the organisations and individuals consulted in the course of the project is provided in Appendix A.

Aboriginal community consultation where referred to throughout this document means consultation with the La Perouse Aboriginal Land Council, the Dharawal Elders and any other groups or individuals within the local Aboriginal community. Consultation aims to be inclusive of all interested groups and individuals. As stated throughout the document Aboriginal community consultation and participation is a key aim in relation to the existing and future management of the La Perouse Headland and Botany Bay National Park North.

The Historical Background of the study area has been prepared as a separate volume finalised in December 2006 by Dan Tuck (Volume 1 of this CMP). It is titled ***La Perouse Headland, Botany Bay National Park, NSW, A Shared History***. The findings of the historical research are incorporated in this report. This report builds on numerous previous studies of the headland.

1.2 Introduction

The La Perouse Headland Area ('the Headland') is located on the northern headland of Botany Bay within the Botany Bay National Park (BBNP). Overlooking the sheltered, inner harbour waters of Botany Bay, the headland and associated Bare Island is a spectacular historic landscape.

The human history of the headland dates back thousands of years to when Aboriginal people were the sole guardians and users of this resource rich maritime locality.

The La Perouse site and Bare Island were among the first sites in the Sydney Region visited by Europeans. Both Captain Cook and Joseph Banks noted the area, particularly Bare Island, and the First Fleet anchored near the site in 1788. Most notably the first recorded European occupation of the Headland was by a French expedition led by La Pérouse, Jean-François de Galaup [Comte de La Pérouse], which also anchored in Botany Bay in 1788, near the First Fleet

before the British departed for the more suitable Port Jackson. The French expedition occupied the Headland to re-build and repair their boats.

Although the French Expedition disappeared at sea in the Pacific, the connection with the French maritime tradition has been dynamic and ongoing, celebrated with the gifts of plaques from visiting French merchant and naval sea captains and through annual events. Fabric associated with occupation by the French was mainly ephemeral except for the grave of the Catholic priest, Père Receveur, a Franciscan monk and naturalist, who died on February 17th 1788, and was buried at the Headland. In 1828 at the instigation of the French government a monument was erected to La Pérouse and a more substantial tomb was erected for Père Receveur.

The first monumental building on the headland was the c.1822 stone tower, now known as the Macquarie Watchtower, which was used as a watchtower, then as a Customs Station and a residence and school. The sub-marine telegraph connection between Australia and New Zealand completed in 1876 initially terminated in tents and wooden buildings until the comparatively massive, rendered brick masonry Cable Station building was constructed between 1881 and 1882. By c.1903 the Cable Station function and equipment had been moved to Yarra Bay House and the building was re-used as nurses quarters, then as a Salvation Army home before its current use as a local museum.

The La Perouse peninsular is also associated with defence works. It was occupied by a battery of 40 pounder Armstrong guns in 1871, then construction of the fortress on Bare Island commenced in 1881. It was an integral element of the Sydney defence strategy. The fortress had a brief operational life. It has been plagued by structural issues associated with the use of poorly made concrete.

The peninsular also has a long history as a tourism destination, which was facilitated by the survey and construction of a roadway in 1869 and then a tramline, which opened in 1902.

The Botany Bay National Park including the La Perouse Headland area was gazetted in 1988 and is managed by the Department of Environment and Climate Change, Parks and Wildlife Group, formerly the NSW, National Parks & Wildlife Service (NPWS). The La Perouse Headland area is managed by the Harbour South Area.

1.3 The Purpose of this CMP

The preparation of a Conservation Management Plan for this site is required to ensure the development of adequate strategies, guidelines and actions that will allow for its appropriate conservation of heritage significance and to guide future use and management.

The objective of this consultancy is to produce the final stage of a Conservation Management Plan for La Perouse Headland, through the review of existing documentation building on Stage 1, which comprised:

- Historical Analysis
- Physical Analysis of La Perouse Headland (including buildings, movable heritage, structures, Aboriginal sites, natural heritage and landscapes)
- Comparative Analysis of La Perouse Headland and the various buildings, structures, Aboriginal sites, natural heritage and landscapes within,
- Assessment of Significance for La Perouse Headland including the community values and attachments and the values of the various buildings, structures, Aboriginal sites, natural heritage and landscapes within (using the NSW Heritage Office criteria and Australian and NSW historical themes),
- Summary Statement of Heritage Significance for La Perouse Headland and the various buildings, structures, Aboriginal sites, natural heritage and landscapes within.

Stage 2 includes the preparation of the following sections:

- Constraints and opportunities arising from identified significance values, the condition and integrity of the place, statutory compliance requirements, non statutory considerations and Parks and Wildlife Group (PWG) Policy and management needs as well as issues arising from stakeholders concerns including community values and attachments.
- Conservation Policies and Guidelines
- Implementation Strategies and Actions.
- The implementation strategies and actions recommended in this report are underpinned by the Inventory provided as Appendix A to this report
- The Inventory addresses individual buildings and structures and the landscape. Each inventory sheet includes specific brief historical backgrounds, chronologies, descriptions, significance policies and implementation recommendations for necessary catch-up and maintenance works.

1.4 Methodology

The Conservation Management Plan has been prepared in accordance with the philosophy and definitions as set out in the *Burra Charter* and *Guidelines to the Burra Charter* issued by Australia ICOMOS; the *International Cultural Tourism Charter* (as adopted by ICOMOS 1999); Australian Heritage Commission's *Australian Natural Heritage Charter*; J.S. Kerr's Conservation Plan; the NSW Heritage Manual; Heritage Office CMP guidelines; as well as taking into account additional requirements which need to be considered to satisfy the Parks & Wildlife Services management needs, and legislative and NSW Heritage Council requirements.

The separate history prepared by Dan Tuck, was formulated from a review of contemporary and modern historical documentary resources, complemented with material obtained from new research conducted specifically for this project.

Resources and Archives utilised in the preparation of this report were varied and included:

- State Library of New South Wales (SLNSW) – Mitchell Reading Room (ML); State Reference Library (SRL); & Dixon Reading Room (DL)
- State Records of New South Wales (SRNSW)
- State Library of Victoria (SLV)
- Randwick Library (RL) - Maroubra Junction
- National Archives of Australia (NAA)
- Australian War Memorial (AWM)
- National Library of Australia (NLA)

1.5 Limitations

This report has been prepared based on the requirements set out in the Briefs prepared by NPWS for the Stage 1 and Stage 2 *Preparation of a Conservation Management Plan for the La Perouse Headland*.

The study is limited to the area at the southern end of Anzac Parade, inside and around the Loop Road and includes Bare Island to the south (see Figure 1.2). It does not include the Loop Road itself, which is managed by Randwick City Council, nor does it include the adjacent beaches of Frenchmans Bay and Congwong Bay or the residential areas north of the Loop Road. However, the surrounding area is considered in so far as it provides a context for the history of the Headland and the community values and attachments to the Headland.

Specific genealogical research has not been undertaken as part of this study and therefore particular family names are rarely mentioned.

Consideration of Handback and Co-management is outside the scope of the report and will be the subject of future discussion.

Potential for National Heritage Listing of specific buildings and social values has been discussed in this report. However formal application of the National Heritage List criteria, which requires additional research including interstate comparisons was beyond the scope of the study.

Consideration of the Laperouse Museum collections was beyond the scope of the study; a separate Collection Management Plan is required to address the Laperouse Museum collections.

New historical archaeological investigation was beyond the scope of the study. Consideration of the historical archaeology of the site was based primarily on the 1989 *La Perouse and Bare Island Historic Sites, La Perouse – Conservation Plan – Historical Archaeology*, Report prepared for the Department of Public Works, NSW by E. Higginbotham.

It was agreed at an early stage in the project that examination of the landscape within the study area would focus on the existing and former vegetation communities, on regeneration opportunities and minimisation of impacts, rather than on the small existing populations of birds and wildlife.

1.6 Location & Study Area

The study area is located on the south east coast of the Sydney metropolitan area. It is the most northerly headland of Botany Bay National Park. The study area for this CMP is illustrated in Figure 1.2. The study area does not include the circle of the Loop Road at the southern end of Anzac Parade, which is not managed by the Parks & Wildlife Service. Figure 1.1 shows the metropolitan context of the site.





Figure 1.2 The La Perouse Headland including Bare Island, showing the Study Area. Base aerial photograph reproduced from Google Earth)

— Botany Bay National Park boundaries (line is approximate due to computer graphic limitations).

1.7 Terminology

There are a number of ways of referring to the explorer associated with La Perouse, the place and with the associated monuments. This report adopts the following terminology:-

- for the person, the *Australian Dictionary of Biography* spelling of **La Pérouse**;
- for the place - **La Perouse**;
- for the museum – **the Laperouse Museum**;
- the expedition is referred to in this report as the **Lapérouse Expedition**;
- the monuments comprising Père Receveur's Tomb and the column monument are referred to as the **Laperouse Monuments**. In other documents they may be referred to as the La Perouse Monuments and the French Monuments. When referred to individually in this document, the column monument is known, in accordance with its NPWS gazettal as the **La Perouse Monument**.

Where other spellings are used they are quotes from other sources.

1.8 Heritage Listings

A summary of the heritage listings that apply to the site is provided below. For more details about requirements associated with the various listings see Sections 8.4, 8.5 and 8.10.3 and refer to the related web pages.

Note: The listings use a variety of terminology and spellings for the names of items and groups of items. The terminology and spelling used in the listing is reproduced below.

National Heritage List

A new national heritage system started on January 1, 2004. *The Australian Heritage Council (Consequential & Transitional Provisions) Act 2003*, repealed the *Australian Heritage Commission Act*, amended various acts as a consequence and allowed the transition to the new heritage system.

The Environment and Heritage Legislation Amendment [E&HLA] Act (No.1) 2003 amended the *Environment Protection & Biodiversity Conservation Act 1999*.

It established a new *National Heritage List* of places of national heritage significance; The obligation arising from listing is that a person must not take an action that has, or will have, or is likely to have, a significant impact on the national heritage values of a national heritage place, without approval from the Australian Government Minister for the Environment & Heritage.

Neither the La Perouse Headland nor any individual items are currently listed on the National Heritage List. A discussion of potential values arising from this study is provided in Section 7.3.

Register of the National Estate

Listed on the Register of the National Estate are:

The Laperouse Monuments Historic Site: Registered on 21/03/1978, Place ID is 1765, the Place File No. is 1/12/030/0027.

The Watch Tower: Registered 21/3/1978. Place ID is 1737, Place File No. is 1/12/030/0004.

The Laperouse Memorial Group (The Laperouse Monument & the Tomb): Registered 21/3/1978. Place ID 1736. Place File No. 1/12/030/0003.

Bare Island Fort: Registered 21/10/1980. Place ID 1758. Place File No. 1/12/030/0025

State Heritage Register

The Bare Island Fort Database No. 5045621, File No. S92/00980 Listing No. 00978, Gazette Date 02/04/1999, Gazette No. 27, Gazette Page 1546.

Randwick Local Environment Plan 1998 – Schedule 3

Laperouse Museum: Listing No.38, Gazetted 26th June 1998, Gazette No.97 Gazette page 5005.

Bare Island Fort & Causeway: Listing No. 297, 26th Gazetted June 1998, Gazette NO. 97, Gazette Page 5020.

Laperouse Memorial: Listing No. 300, Gazetted 26th June 1998, Gazette No. 97, Gazette Page 5020.

National Trust

Bare Island Fort – Classified 05.3902

Watch Tower – Classified

National Parks & Wildlife Service, Section 170 Register

Listed buildings and items are the:

Bare Island Fort,

Cable Station,

Watch Tower,

Laperouse Monument,

Père Receveur's Grave,

Gardens and Lawns, and

Overall listing for the La Perouse Headland.

1.9 Acknowledgements

A number of people have been helpful in preparing this report including David Costello, Acting Manager Harbour South; Cath Snelgrove, Cultural Heritage Manager, Sydney Region; Elizabeth Broomhead, Sydney Region Curator; Rangers Kaiya Donovan, Ben Khan and Senior Field Officer Robert Couley and other field officers. Other people who have been generous with their time and information are:

Glen Blaxland, who has a lot of local information and gave a site tour in January 2007.

David Ingrey, Sites Officer, La Perouse Local Aboriginal Land Council

Dave Lambert, Rock Art Conservator, NPWS, Cultural Heritage Division

Iris Williams

The late Beryl Beller Timbery

Joanne Timbery

Barbara Keely-Simms

Yvonne Simms

Norma Simms

Vic Simms

Liala Haglund, Heritage Consultant

Susan McIntrye, Heritage Consultant

Greg Bond, who was generous with historic photographs, site information and comments.

Ivan Barko (Emeritus Professor) and Doug Morrison have been generous with their fieldwork and research findings, original source information and Doug Morrison also provided a copy of a rare historic photograph.

Denis Gojak who was generous with research findings and information.

Our thanks also go to the numerous people who attended meetings and provided valuable knowledge and ideas during the course of the project. See Appendix A for a more comprehensive list.

1.10 Study Team

This study has been carried out by a small team comprising:

Jill Sheppard – Built Heritage and Significance Assessment;

Dan Tuck – Historical Background;

Kathryn Bohdanowicz – Building fabric analysis and inventory sheet preparation;

Guenter Janssen – Structural Engineering Advice (for Stage 1);

Hilary Sheppard - Contextual Analysis (Stage 1);

Mary Dallas - Aboriginal Archaeology;

Eric Tierney – Aboriginal Archaeology, mapping and field assistance (Stage 1);

Roger Lembit – Environmental Survey and Analysis (Stage 2).

Dr Sandy Blair and Chris Johnston (Context Pty Ltd) prepared the *La Perouse Headland, CMP Community consultation and social values assessment Stage 2* and their findings have been incorporated in this report.

2.0 Historical & Environmental Background

2.1 Historical Background

A comprehensive history of the La Perouse Headland has been prepared as a component of this CMP by Dan Tuck and has been provided in a separate volume. The historical background builds on several previous studies of the Headland and Bare Island. It is titled:–

La Perouse Headland, Botany Bay National Park, NSW, A Shared History, Final Report 2006.

The findings of this CMP arise from consideration of the historical background volume and the contextual analysis provided in Section 6.0 of this report as well as from consideration of the physical integrity of the surviving fabric. Some information provided in the historical background has been included within the appropriate sections of this report (See Section 4.0 Aboriginal Archaeology and Section 6.0 Environment, so that this report can be read in conjunction with the History Report or as a stand alone document.

2.2 Environmental Background

The following environmental background is an extract from the *La Perouse Headland History, NSW, A Shared History 2007* prepared by Dan Tuck, which is provided to give an environmental context to the subsequent analyses. This section has been expanded with the addition of Landscape Inventory Sheet No.10.

2.2.1 Botany Bay

Botany Bay is located in south-eastern Sydney (14 kilometres from the city centre) and consists of an irregular embayment formed within a small tectonic depression generally referred to as the 'Botany Basin'. This basin exists within a broader geological formation composed of modified sedimentary deposits originally laid down in the Middle Permian period and referred to simply as the 'Sydney Basin'.¹

Botany Bay opens to the South Pacific Ocean (Tasman Sea) via a 1.3 kilometre wide channel between the dramatic sandstone peninsulas of Kurnell (in the south) and La Perouse (to the north). The rocky peninsulas, which rise to heights approaching 40 metres, are composed of Hawkesbury sandstone dating from the Triassic period.² This body of rock is the dominant formation within the bay and is both exposed in the sandstone cliffs of the headlands and buried beneath the Quaternary and Holocene aeolian and alluvial sand deposits of the narrow beaches that dot the bay margins.³

¹ Middle Permian 270.6 - 260.4 million years BP; NSW Public Works Department 1990; Branagan, Herbert & Langford-Smith 1979

² Triassic 251 - 199.6 million years BP

³ Quaternary is the last 2 million years; Holocene is the last 10 000 years

Botany Bay National Park (BBNP) is an extensive reserve system of approximately 492 hectares that takes in much of the northern and southern headlands of Botany Bay.

2.2.2 La Perouse Headland Area

One of the prominent areas within Botany Bay National Park is the La Perouse headland, a low jutting peninsula (of approximately 10.4 hectares) within the northeastern corner of Botany Bay. The headland projects approximately north-northeast to south-southwest and presents as a low rounded hill of Hawkesbury sandstone that falls to a series of low sandstone cliffs and rock platforms to the west, south and east. Prominent features of the largely bare headland include the Macquarie Watchtower, the Laperouse monuments, the Cable Station (museum) and the Loop Road. The latter encircles the headland and effectively divides the peninsula into inner and outer areas.⁴ Refer figure 2.1.

Immediately either side of the headland, the rocky terrain gives way to the contrasting beaches and dune systems of Congwong Bay (to the east) and Frenchmans Bay (to the west). These beaches are composed of Quaternary sand deposits and overlying Hawkesbury sandstone beds.

2.2.3 Bare Island

The most distinctive landscape feature of the La Perouse Headland Area is Bare Island located 100 metres south of the headland and separated from it by a narrow channel. This low rocky islet of Hawkesbury sandstone is dominated by the late 19th century Bare Island Fort which accounts for much of its surface area. A wooden bridge constructed after the erection of the fort in the late 19th century accesses the island.

2.3 Environment

The headland, island and adjacent beaches are the products of age old depositional and erosive processes that created the fundamental 'shape' of the landscape and allowed for the establishment of local soil, vegetation and faunal regimes. Since European settlement however, the area has been subject to significant modification as a result of land clearing, landscaping and construction.

2.3.1 The Land

Historical Botanists, Doug Benson and Jocelyn Howell have used historical and scientific information to carefully reconstruct the original vegetation communities that formerly occupied the Sydney's Eastern Suburbs. Their work has concluded that at the time of European settlement, the rocky sandstone areas hugging the coast were dominated by wind-pruned heath

⁴ *La Perouse Headland Conservation Plan*. 1992. Report prepared for the NSW NPWS:2

land and scrubland (Figure 2.2). The development of this vegetation was a consequence of the rocky coastal exposures on which it grew, with common species including:

Table 3.1 Original pre-European vegetation communities

Pre-settlement heath and scrubland species of Southeast Sydney		
Coast Rosemary <i>Westringia fruticosa</i>	<i>Baeckea imbricata</i>	Scrub Sheoak <i>Allocasuarina distyla</i>
<i>Banksia ericifolia</i>	<i>Leptospermum laevigatum</i>	Heath Banksia <i>Melaleuca nodosa</i>
<i>Woolfsia pungens</i>	<i>Darwinia fascicularis</i>	<i>Epacris microphylla</i>
Hakea <i>Hakea dactoloides</i> & <i>teretifolia</i>	Spiny headed mat rush <i>Lomandra Longifolia</i>	Red bloodwood <i>Euclayptus gumminifera</i>

Beyond the immediate coastal heathlands, dune vegetation was characterised by the complex and varied Eastern Suburbs Banksia Scrub (ESBS) - the predominant large scrub species of which were:

- Heath banksia *Melaleuca nodosa*
- Coast tea tree *Leptospermum laevigatum*
- Scrub she oak *Allocasuarina distyla*
- Old man banksia *Banksia serrata*

Most of the indigenous vegetation in the La Perouse area (and indeed in Eastern Sydney as a whole) is gone. Exceptional areas include remnant stands of native vegetation at Long Bay (Malabar) and within the protected areas of BBNP to the east and northeast of the headland. Both of these locations retain communities of heathland and coastal forest, as well as significant remnant areas of the once widespread ESBS.

At the La Perouse Headland small areas of remnant native shrubs and grasses survive. They include native grasses Kangaroo Grass (*Themeda australis*) and Queensland Blue Couch (*Digitaria didactyla*) and it is possible that the Couch grass is a native variety. Remnant native shrubs include Coastal Wattle (*Acacia longifolia* ssp. *Sophorae*) and Coastal Tea Tree (*leptospermum laevigatum*).

On Bare Island, Coast Rosemary (*Westringia fruticosa*), Dusky Coral-pea (*Kennedia rubicunda*), *Monotoca elliptica*, Dune Fan-flower (*Scaevola calendulacea*), Pigface (*Carpobrotus glaucescens*), Kangaroo Grass (*themeda australis*) and Heath-leaved Banksia (*Banksia ericifolia*) have regenerated to a degree.

Some of the earliest photographs (See History Volume) show low scrubby bushes on the headland, which is mostly lawn today.



Figure 2.1 Shows the low shrubby vegetation on Bare Island c. 1870-1875, before the construction of fortifications. (SLNSW ML GPO 1-05254 & ON 4 Box 58 Nos. 289, reproduced from Tuck, 2006) See also Tuck, 2006: Figure 10.2, which shows what appears to be a stand of tea trees on the headland shore.

2.3.2 The Sea

The most significant, largely unaltered natural feature of the area is Botany Bay itself. It was the rich blue waters of the Bay, bountiful in resources and mythology that drew the first Aboriginal inhabitants to the area and later provided a backdrop for some of the key events in the initial European exploration, incursion and tentative settlement of Australia.

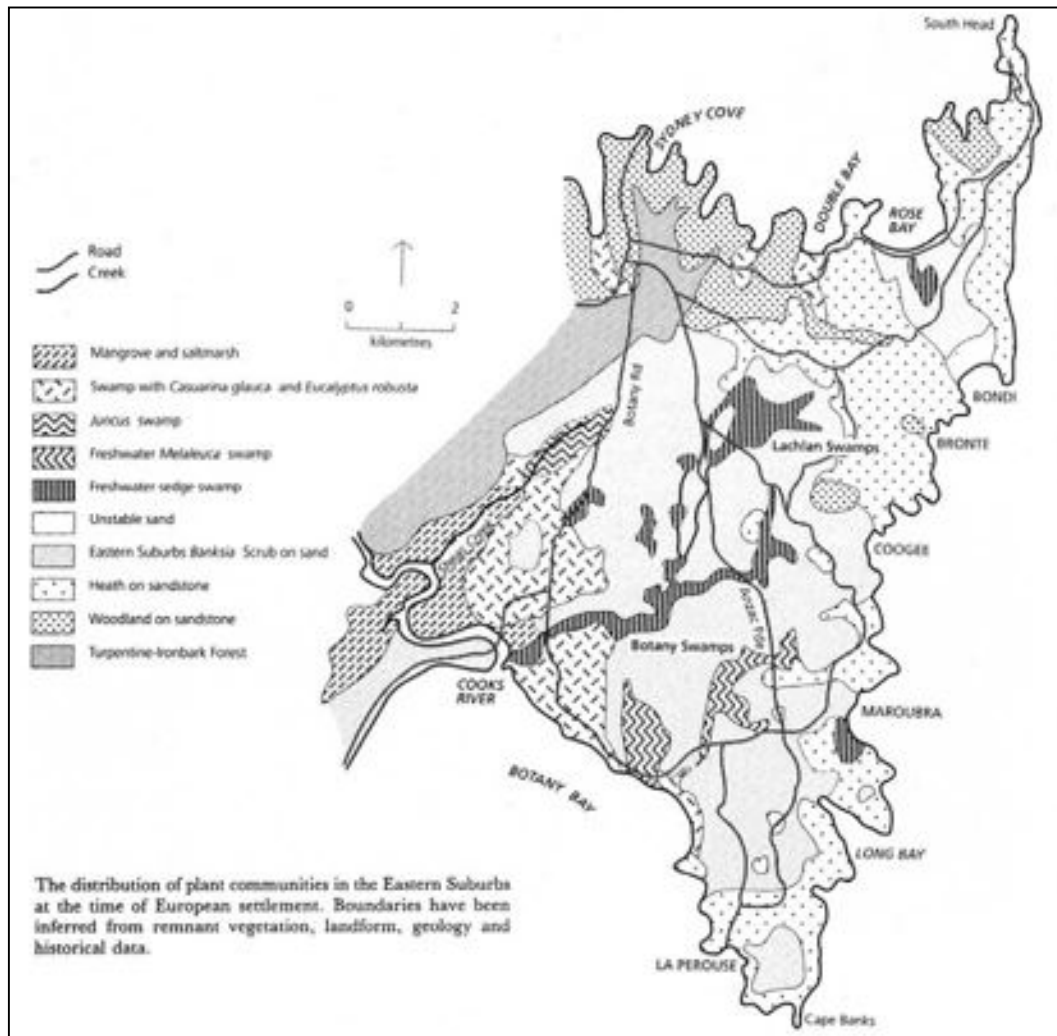


Figure 2.2: Pre-European Vegetation Landscape in Southeast Sydney (Benson & Howell 1995: 90)

3.0 Buildings & Structures

3.1 Introduction

There are three standing building complexes within the Headland study area. The extant building complexes are:

1. The sandstone Macquarie Watchtower constructed c.1822, which is the surviving remnant of a complex of buildings that developed from c.1820 until the Customs Service took the Station out of service in 1903 and a fire destroyed the cottage addition around the base of the tower in 1957. (See Inventory No.1)

2. The Cable Station building complex constructed 1882 is also the remnant of a larger complex of buildings and structures associated with the operation of the Sydney/New Zealand submarine telegraph cable from 1876 to 1913. The current Cable Station building complex comprises:

- the Cable Station building, now operated as the Laperouse Museum; (Inventory No.2)
- the Battery Room; (Inventory No.3)
- the Store Room; (Inventory No.4)
- the Courtyard. (Inventory No.5)

3. The Bare Island Fortress complex was completed in two main builds, firstly the arc of guns and then the Barracks. McLeod carried out the original fortification works between 1880 and 1890, and the barracks works by de Wolski, primarily occurred between 1890 and 1895 and were completed in 1912. (Inventory No.9)

In addition to the building complexes there are two structures and a number of miscellaneous items including drainage work and rock cuts associated with former buildings and structures:

- La Perouse Monument, (Inventory No.6)
- Père Receveur's Tomb. (Inventory No.7)
- Miscellaneous Items. (Inventory No.8)

The inventory sheets that address each of the extant complexes and structures are provided in a separate Volume (Volume 3). The inventory sheets summarise the known history of each building or structure, identify architectural features and provide significance assessments, risk assessments, an appropriate management approach and recommended maintenance and catch-up works, adaptive re-use and interpretive opportunities.

4.0 Aboriginal Archaeology

4.1 Regional Archaeology

Aboriginal people have occupied the greater Sydney region¹ for at least 20,000 years. Dated rock shelter sites in the Blue Mountains and its foothills range from 15,000 and 22,000 years before the present². Two dates ranging from between 10,500 to 12,000 ago have also been reported for an open camp site at Regentville³, whilst a shelter on Darling Mills Creek at West Pennant Hills has also provided a date of a little over 10,000. Two other open campsites in western Sydney at Doonside⁴ and Rouse Hill⁵ have also revealed later occupation with dates ranging from between 4,600 and approximately 6,000 years ago.

The earliest dated sites on the coast are located to the south at Burrill Lake (dated to 20,000 years ago) and at Bass Point (dated to 17,000 years ago). Both of these sites would have been occupied at a time when sea level was much lower and the area along the present coastline and their environmental context would have been an inland environment drained by streams⁶. It could be expected that many Aboriginal sites have been overlain by post contact occupation. Two other sites dated to around 7-8,000 years before the present comprise a sheltered midden at Curracurrang⁷ and an open campsite (containing a hearth) at the Prince of Wales Hospital in Randwick. The Prince of Wales Hospital site⁸ comprised a deflated hearth and a small number of stone artefacts on a dune formation adjacent to an extensive series of swamps. Analysis of fats on a hearth stone at this site indicated that a freshwater fish meal had been cooked on the hearth.

Most sites in the Sydney region date to within the last 5,000 years and the majority of these are dated to within the last 2,500 to 3,000 years. Evidence suggests that the early Aboriginal occupation of the Sydney region was not intensive nor included large groups of people, and that around 5,000 to 6,000 years ago (when sea levels had stabilised at the present levels) more intensive use of the landscape by Aboriginal people began. It is also likely that particularly rich or varied environmental zones such as are exhibited along the northern side of Botany Bay that include: rocky coast, headlands and tidal rock platforms, sheltered sandy embayments and an all-weather beach, hanging and dune swale swamps and coastal heath and woodland; will contain repeatedly occupied sites with larger or more extensive occupation deposits.

The distribution of Aboriginal sites is strongly related to bedrock geology and local topographic features, including elevation and water resources. The sandstone formations in the Sydney

¹ The following discussion contains some summarisation from Dallas & Tuck 2005

² See Stockton & Holland 1974 and Kohlen et al 1984

³ McDonald et al 1996

⁴ JMCHM 1999

⁵ McDonald et al 1994

⁶ see Lampert 1971 and Bowdler 1970

⁷ Curracurrang is located in the Royal National Park.

⁸ See Dallas et al 1997 [also in GML 2002]

Basin contain painted and engraved art as well as occupation deposit under sheltered overhangs. Geology in this case directly determines or limits the regional distribution of these site types while other factors such as aspect, exposure to prevailing winds or frost, etc, determine the precise or preferred location of the sites within the sandstone formations. Sandstone surfaces were also used to form or maintain a working edge on stone hatchets. The grinding process was usually assisted by the use of water in whetstone fashion and these sites are usually adjacent to or near waterholes, rock pools or water courses. Similarly the types of stone available to Aborigines for use as raw materials in stone tool manufacture, is determined by geological features and processes. For example quartz may be found in conglomerate sandstone beds and may be available locally for stone tool manufacture. Silcretes and other fine-grained rocks would have had to be imported or traded into this area. The nearest known resources would have been in Tertiary aged deposits at Newtown in Sydney, at Plumpton, West St Clair and Riverstone on the western Cumberland Plain and along the coast around Wollongong.



Figure 4.1: View to west over rock platforms fringing Botany Bay from Bare Island access road. Photograph by Dallas.

Within this area, topography is unlikely to have influenced or limited the movement and activities of Aborigines in the past. Local sandstone formations while containing steep sided ridges and high coastal cliffs, did not limit access to preferred sites. Access could be gained along and between the ridges and elevated sites along these features are relatively common. The practice of regularly burning the scrub would have allowed easier walking through the otherwise densely vegetated slopes, dunes and/or creek lines. Variations in the slope or gradient of the ground surface acted as a constraint on some activities, particularly camping. Surfaces with slopes of less than 5% are likely to have been

favoured for camping. In broad terms, flat ground surfaces suitable for campsites will be found either on the flat tops of spurs and ridges [e.g., in saddles] or in valley bottoms along water courses. However open camp sites are extremely rare in the sandstone formations. Occupation sites are commonly found in sheltered contexts within sandstone overhangs where the sandstone has formed or has weathered to produce sufficient cover from the elements or in open areas along sandy beaches at points sheltered from prevailing strong winds. Midden deposits are usually found relatively close to the shellfish resources, along sandy beaches or mangroves [pipis, mud whelk, mud or floating oyster and cockle] or within sheltered overhangs near the open tidal rock platforms of the headlands and embayments [oyster, whelk, abalone,

limpet, cart-rut]. Shellfish and fish are known to have been carried considerable distances to preferred sites from the point of collection.

The most common and durable form of evidence that is available for understanding how Aboriginal people may have lived in the region in the past consists of flaked and ground stone artefacts. Most other items made and used from organic materials in the past have generally not survived over time. It can be postulated that the bulk of the tool-kit of the Aboriginal people of this area comprised non-durable items and that some of these [digging sticks, boomerangs, canoes, wooden spears, fishing nets and line] directly provided or contributed to the provision of the bulk of the food supply.



Figure 4.2: Prattent's engraving of Aboriginal Implements (1789)
 This image which depicts a stone tomahawk, bark basket and 'knife' (?) relates to material recorded during the voyage of Governor Phillip to Botany Bay in 1788.
 (SLV - Image Number: pb000236)



Figure 4.3: Aboriginal woman (with child) fishing in Botany Bay (1805)
 This watercolour (the painter is unknown) is taken from a series entitled *Natives of New South Wales; drawn from life in Botany Bay*

(ML SLNSW ML Ref: PXB 513)



Figure 4.4: Richard Browne's watercolour of Killigrand (c1810)
Image depicts an Aboriginal fisherwoman with the 'tackle' of the time - line (with float & hook) and a net carry bag.
(Image presented in Radford & Hylton, 1995: 21)

Stone tools are largely specialized items. Stone tipped spears and spear throwers are designed for particular methods of hunting and scrapers and hatchets for hide or wood working and for the production of spears, canoes and items used in the transport of food or water such as wooden containers, coolamons and dishes. Many others items made of plant fibre, wood, bark, reeds or rushes such as dilly bags, clothes and adornments did not require stone tools in their manufacture.

A number of changes over time in stone tool assemblages and the use of certain types of raw materials by Aboriginal people for tool manufacture are well documented through archaeological research. It is assumed that changes in the stone toolkit are likely to have been accompanied by and/or triggered through other significant developments in the broader social, spiritual, economic and technological lives of the traditional Aboriginal occupants of the region. Ongoing research is serving to confirm this likelihood.⁹

The most widely used terminology for the archaeological phases in south eastern Australia within what is currently known as the *Eastern Regional Sequence* are the *Capertian*, and the *Early, Middle and Late Bondaian*. The following sequence in the archaeological record is apparent.

⁹ See also Attenbrow, V. 2002. *Sydney's Aboriginal Past: Investigating the Archaeological & Historical Records*. University of NSW Press, Sydney.

The *Capertian* phase is essentially composed of large, heavy stone artefacts. Tool types include uniface pebble tools, core tools, denticulate stone saws, scrapers, hammerstones, some bipolar cores and flakes, and burins. The change from the *Capertian* to the *Bondaian* appears to have taken place some time after 5,000 years BP, and is defined by a noticeable shift in stone tool size, raw material use and in the range of raw materials utilised for tool production.

The three phases which are recognised as belonging to the *Bondaian* sequence are largely based on the timing of the introduction, and subsequent decline, of backed stone implements, as well as the increased use of bi-polar flaking techniques. Other technological innovations, which are evident during the *Bondaian*, included the introduction of ground edge implements (c4000 years BP), and the widespread use of shell fish hooks during the last 1000 years. Stone tool assemblages in archaeological sites containing a particular range of features can therefore be relatively dated.

The three phases of the *Bondaian* are summarised in the Table 4.1. The dates for each are only approximations but are derived from many dated archaeological sites on the east coast.

Table 4.1: Archaeological Phases for the Bondaian Period

EARLY BONDAIAN	
Date	5000 – 2800 years BP
Dominant raw material	Fine grained siliceous chert and silcrete
Characteristics	Features of the Capertian appear to have continued in many areas, but backed and edge ground implements were widely introduced and used.

MIDDLE BONDAIAN	
Date	2800 – 1600 years BP
Dominant raw material	Fine grained siliceous chert and silcrete. Increased use of quartz.
Characteristics	Increased use of microblades such as bondi points and an increase of bipolar artefacts. Few ground edge implements.

LATE BONDAIAN	
Date	Last 1600 years
Dominant raw material	Includes quartz with some uses of other raw materials.
Characteristics	Microblades including bondi points are absent, but eloueras and bipolar pieces are dominant in known assemblages. Edge ground implements are also more common. Bone and shell implements including fish hooks, occur at some sites

4.2 Local Archaeological Background

A search of the Department of Environment & Climate Change, Aboriginal Heritage Information Management System [DECC AHIMS] for the section of coastline extending from approximately Cape Banks north to Dunbar Head, and up to 4km of hinterland parallel with the coast, indicates that over 180 Aboriginal sites¹⁰ have been previously located, recorded and registered to date.¹¹

Site types include rock engravings, open and sheltered middens, shelters with art and/or archaeological deposit, axe grinding grooves, open campsites or stone artefact scatters and burial sites. The majority of sites are located along the immediate coastal strip or Bay shores where there has been less intrusive development and less destruction of original land surfaces and sub-surfaces or buried deposits which might contain Aboriginal archaeological evidence. There are large areas of National Park, Reserves and Golf Courses within the broader area and further Aboriginal heritage sites are likely to be found, particularly subsurface in the many sand dune formations throughout the area¹². Such land uses are relatively non-intrusive and undisturbed buried archaeological deposits including human burial sites could be expected were current land surfaces to be disturbed.

10 The registered sites identified in the DECC AHIMS site search include in certain cases multiple traits (for example rock shelters with midden and art); the database therefore specifies 180 individual Aboriginal entries and 209 traits listed within the parameters of the search for the area. This has been found to be a far more cumbersome system for recording Aboriginal sites than the previous method and has skewed and obscured site type densities and not simplified analysis of site distributions. Simply put, there are 180 site locations in the area, a few of which contain a number of extra elements which on their own might constitute an individual site and warrant separate registration. E.g., a sheltered overhang with archaeological deposit might also contain painted art on the roof or rear walls and may contain axe grinding groove.

11 The coordinates for this AHIMS search were Easting 336000 to 342000; Northing 6237000 to 6255000.

12 e.g., hearths and artefact scatters have been unearthed during development at a number of places along this coastal strip.

Table 4.2: Aboriginal Cultural Heritage Sites in the South Eastern Sydney Region.

Description of Site Type	Number
Rock Engraving	70
Midden	42
Shelter with Midden	38
Shelter with Art	23
Open Campsites	16
Shelter with Deposit	8
Axe Grinding Grooves	5
Burials(s)	5
Contact Mission	1
Historic Place	1

The predominant type of surviving Aboriginal site in the area is rock engraving. These are beautiful engraved depictions of familiar items in the physical and spiritual world of the Aboriginal people who created them. They are situated along the various coastal headlands and bluffs occurring on the extensive, relatively even sandstone platforms. There are concentrations of such sites at La Perouse, Long Bay, Maroubra, Coogee and Bondi. Also relatively common are open and sheltered campsites that fringe the ocean foreshore in-and-amongst the principal beaches, bays and inlets.

Little archaeological research or detailed archaeological site investigation has been undertaken in the La Perouse area. A number of areas have been test excavated prior to development to the north and south of the La Perouse Headland, including areas along the Kurnell peninsula¹³. As previously mentioned the excavations at the Prince of Wales Hospital site have identified an area which proves the Aboriginal owners were utilising the site as early as 7,800 years ago. This was at a time when this particular landscape would have been much further inland from the coast and the Aboriginal people would have encountered an elevated inland swamp system far from the present coast line.

McIntyre¹⁴ test excavated a shell midden along Frenchmans Beach. Haglund¹⁵ test excavated the core of a dune upon which a Helicopter base station was to be installed, and monitored trenching for services along the main access road to the parking area. These works were in the vicinity of **AHIMS site # 45-6-2153, 45-6-2154 and 45-6-2155** near historic burials of Aboriginal people within the Coast Cemetery. No additional or significant items were identified during these investigations.

¹³ Mary Dallas Consulting Archaeologists 2001; 2003

¹⁴ McIntyre

¹⁵ Haglund 2006

4.3 La Perouse Headland Area

Within the immediate La Perouse Headland Area, there are a series of engraving sites and midden sites. Some are known to have been disturbed or destroyed or are otherwise no longer visible due to wind and sand erosion. The engravings located on the La Perouse Headland [see Figure 4.5, 4.6 and Table 4.3] are a series of individual depictions scattered across the rock platforms on the Headland. The recorded engravings have been accessioned onto the DECC AHIMS as separate engravings and given individual site numbers.

Over the years there have been numerous attempts to re-locate and record these engravings. The additional recordings have produced different results in terms of both the number and types of individual motifs which have been reported to be present at particular locations. Some interpretation of what is at each location [e.g., 'shark' vs Fish] has also differed between recorders. Finally, there are apparent errors in directions to get to individual engravings, which have been compounded by later recorders using the earlier directions, identifying the problem with them but then providing different grid references. Consequently by 1989¹⁶ only one or two of the series of engravings could be relocated. It has been reported by different field researchers and local residents, that attempts to relocate most other elements of this site, have failed¹⁷. It has also been reported that many of the known engravings [i.e., those recorded by Campbell in 1899] are covered by grass, faded, are barely visible or have been damaged or destroyed by the construction of roads.

4.4 Previous Investigations/Recordings/Significance Assessments

The well known Aboriginal engraving site of the whale and its baby located at the south western end of the La Perouse Headland has been the subject of a detailed site recording by the eminent Aboriginal art site conservationist David Lambert¹⁸. Mr Lambert is a DECC officer who specialises in rock art preservation and conservation. He undertook a night-time inspection of the location of the whale and calf location under halogen light and by non-intrusive means, recorded the engraving. None of the other engravings in Campbell's series were subject to the same detailed recording by Lambert at that time.

In 1989 Haglund undertook an assessment of the sites at the La Perouse Headland. She, like other researchers, had difficulty identifying all of the engraving site elements partly because of the earliest recorder's¹⁹ ambiguous site relocation directions and partly because of subsequent site deterioration. She also believed there had been destruction of site elements due to road

¹⁶ Haglund 1989

¹⁷ Haglund 1989; David Ingrey pres. comm. 9.2.07.]

¹⁸ Lambert & Biddle 2001

¹⁹ Campbell 1899

construction and landscaping. She made recommendations concerning more detailed investigation in particular areas²⁰ not all of which do not appear to have been undertaken.

As part of Haglund's study a significance assessment of the engraving sites was undertaken by Josephine McDonald. She compared the Headland sites with over 700 engravings sites in the greater region. McDonald identified the commonality/rarity of the sites at a local and regional level. She concluded that the whale and calf **AHIMS # 45-6-648**, is distinguished as being extremely rare in the region whereas the fish, 'tomahawk' and segmental marks **AHIMS # 45-6-649** and **-650** are relatively common and very representative [See Summary Statement of Significance].

4.5 Current Study - Field Inspections Findings

The current study included a number of surveys of the Headland to attempt to re-locate all previously recorded engravings, including those thought to be faded or to have been destroyed. The survey included verification of the recorded locations using a hand held GPS.

Table 4.3 lists the items previously recorded on the La Perouse Headland. **Figure 4.5** provides their locations. Both the table and the map indicate which of the recorded sites [i.e., those with DECC AHIMS site numbers] were identified/re-located during the current study and which ones were not found. In addition the area previously identified by Haglund as requiring further study was found to contain two possible engraved lines.

²⁰ Haglund 1989 see Figure 1.2

Table 4.3: Aboriginal Site Inventory La Perouse Headland

AHIMS #	Site Type/Content	Recorder[s]	Condition as at Jan.07	Grid Ref
45-6-648	Engraving of Whale and calf	Campbell, Mathews	Poor, exposed, sand- blasted natural weathering	Grid References are provided in NPWS Staff copies of this report
45-6-649	Engraving Fish and Tomahawk	Campbell, Mathews [shark and anvil shaped figure with deep V	Fish has been recently partly re-scored, by a vandal rubbing across part of the earlier Aboriginal engraving fish outline creating a smaller fish using only part of the original. The tomahawk remains clear and distinct.	
45-6-650	Engraving of a faint circle with 'peculiar segmental marks	Campbell McCarthy	Not relocated by the current survey , or by Haglund's 1989 survey. Note: Campbell's grid reference are the same for -649 and -651. The only other clearly visible marks at this point was a surveyor's mark.	
45-6-651	Engraving of two deeply cut Boomerang like marks, one with a reverse curve.	Campbell	Located within 10m of fish with Tomahawk.	
45-6-652	Engraving of shark? 13'6" long	Mathews	This figure may be a re-recording of the fish at 45-6-649. The shark is recorded as 130yards SW of Monument, and this is roughly the position of 45-6-649	
45-6-653	Vertical Engraving of 1 kangaroo and 1 incomplete kangaroo	Sim 1963 and McCarthy 1983	Not relocated by current study. Reported to be located at South end of Frenchman's Beach 6' west of road to wharf. The rock is built over by Kiosk/Paragon Restaurant	
45-6-1144	Shell midden	R. Taplin	Reported to be located on a raised rocky point facing Frenchman's Bay [see above possibly on rock above the vertical engravings #45-6-653].	
45-6-1145	Shell midden	?	Not visited during current study. Reported to be located on slope from Anzac Parade to Conwong Beach and partly destroyed [Haglund 1989].	

* hand held GPS: current study

+Campbell 1899/DEC Site Form at 1:250000

~ DEC Site Form at 1:250000



Figure 4.5: Aboriginal site locations La Perouse Headland. (Note: Campbell's grid reference is the same for -649 and -650 and 45-6-650 was not relocated. Refer to Table 4.3)

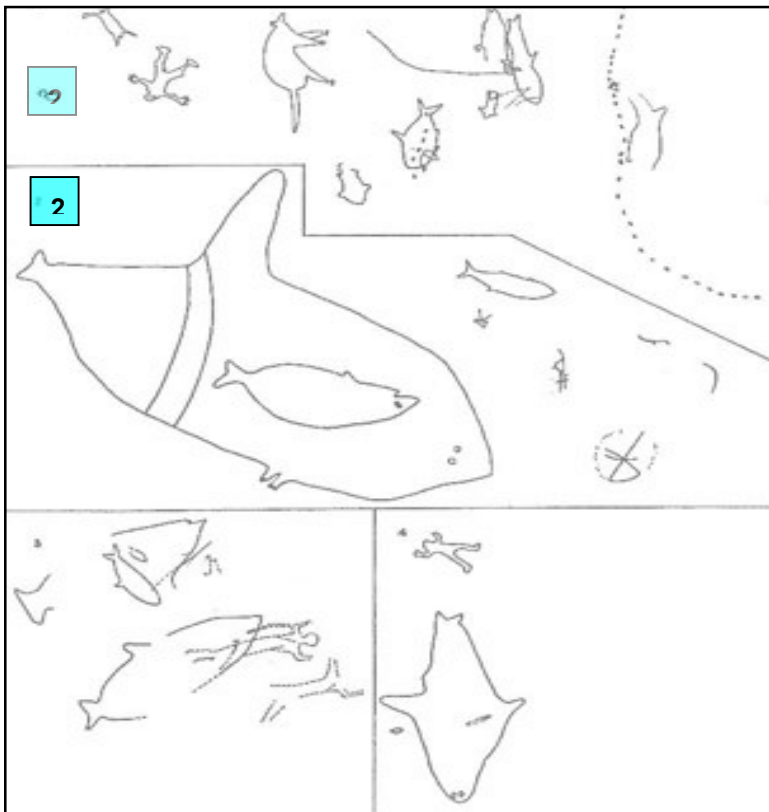


Figure 4.6: Campbell's recording of rock engravings at La Perouse Headland (Campbell 1898: Plate 3, Series 2, central group referred to as AHIMS #45-6-648 – 45-6-651)

The Legend of the Whales

The legend of the whales began back in the Dreamtime when the bay that we know as Little Bay was called Stingray Bay. One time while a whale was on his 'journey; to Antarctica he stopped in Stingray Bay and thought it would be a great resting spot for all the whales that were going on the journey. So he went and got all the whales and brought them back and scared all the stingrays out of the bay. When the mother whales gathered and had a meeting there were two baby whales and they were always causing havoc, so the mother whale said to them to go and play somewhere else ... So the baby whales went to play around a mound of rocks ... But they didn't notice that while they were playing the rocks were rising more and more out of the water until they formed what we know as Bare Island. The locals of the La Perouse community believe that the whales that went missing are Bare Island and the mothers are the mainland. And when you visit La Perouse and Bare Island remember this legend.

Dean Cooper & Kurt Martin-Baker in *Talking Lapa* (Office of the Board of Studies [NSW]. 1995. 43).

4.6 Field Verification of the Locations of the Recorded sites

Some of the engraving sites, inclusive of the well known Whale and calf [AHIMS # 45-6-648] along the southern side of the Headland, were first recorded many years ago, at least as early as 1899 by Campbell and Matthews and subsequently by F. D. McCarthy. McCarthy reproduces Campbell's figure but does not refer to Matthews recording, nor does he refer to Matthew' site location directions or individual descriptions. The depiction of the whale and calf appears to be the only engraving that all later recorders agree upon. Recorders subsequent to Campbell do not refer to all of the motifs Campbell recorded, or in the same way that he did, for example, a motif described by Campbell²¹ as a large fish with a 'tomahawk' [AHIMS # 45-6-649] subsequently became 'a 7' long shark with an anvil-shaped figure with a large V on one side' when described by McCarthy²². In addition to the above depictions Campbell describes two boomerang shaped lines [AHIMS # 45-6-651] and 'peculiar segmental marks [AHIMS # 45-6-650] whereas McCarthy only describes two indeterminate figures.



Figure 4.7: View to Cable Station from Whale engraving AHIMS # 45-6-648



Figure 4.8: View to south head of Botany Bay from Whale engraving AHIMS # 45-6-648

²¹ Campbell 1899:6

²² McCarthy 1983:Volume 1 Part 1 p.45

There are also fundamental problems with site location details. Most of the engravings in Campbell's series are referenced to point 180m [9 chains] from the Whale and calf but no direction is specified. The Fish and Tomahawk are supposed to be located at this distance whereas the current study identified the Tomahawk shape and a portion of an old engraved line which had been re-scored to form a smaller fish at less than 20 metres to the north of the Whale and calf. The idiosyncrasy of the Tomahawk depiction makes it unlikely to be a different engraving. In addition, the boomerang shaped figures were identified by the current study in the immediate vicinity [on the same rock] as the Tomahawk. [See Figure 4.9]. Campbell's description of the boomerang marks as including a 'reverse curve' is perfectly matched by the engraved lined at this location.



Figure 4.9 Engraving of Fish and "Tomahawk" AHIMS # 45-6-649 the fish has recently been modified and made smaller by re-scoring incorporating an older engraved line.

It would appear from the current field inspections that almost all the Campbell engravings are located in relatively close proximity to each other at the south western end of the Headland (See Figure 4.5).



Plate 4.9: General location of two engraved lines, first identified by David Ingrey. This is also the location identified by Haglund 1989 as requiring closer inspection

The area previously identified by Haglund as requiring further study was found to contain two possible engraved lines. This area is situated 20m south of the guard rail on Anzac Parade approximately 100m to the east of the Wale and calf engraving. Her original assessment of this area has been confirmed. David Ingrey has identified two possible engraved lines running approximately east west which may be part of a larger engraved figure. This area should be the subject of night time inspection/recording and consideration given to removal of adjacent encroaching soil and grass cover.

The recorded location of one of the shell middens **AHIMS #45-6-1144** was re-visited. Haglund reported this site to be largely destroyed by road works. However at this location there are disturbed pockets of shell deposits and patches of surface shell, which are disturbed but are clearly derived from a cultural deposit. The remains of the previous Kiosk known as the Paragon Restaurant, including a small stone walled garden bed and footings are present at this location. Midden material has been used in the garden bed. The access road to the wharf runs immediately adjacent and the asphalt may have covered midden deposit and possibly the remains of any earlier cobbled road.



Figure 4.10: Truncated shell deposit on sandstone platform at the far southern end of Frenchman's beach

AHIMS #45-6-653, a vertical engraving comprising two kangaroos, is likely to be in close proximity to, or below the midden on the vertical face of the rock platform. This engraving could not be re-located.



Figure 4.12: Vicinity of AHIMS # 45-6-1144 looking east to roadside retaining wall covering AHIMS # 45-6-653

AHIMS #45-6-1145, is a shell midden located to the east of the Headland at Conwong Beach. This site is outside current study area.

4.7 Findings

Despite the considerable uncertainty about the precise locations of the individual elements or depictions as specified and recorded by the earliest recorders, Campbell and Mathews, the current study has identified most of the originally recorded motifs. The Whale and calf, though difficult to see all of it from any single angle in bright sunlight, has deep peck marks and engraved segments. The boomerang shaped lines and, the 'Tomahawk' and fish were identified [motifs very similar to the original Campbell drawings] but are not in the location he specified. Only 'the 'peculiar segmented lines' could not be identified. The vertical kangaroo engravings are believed to be covered by a roadside random rubble retaining wall. The shell middens are variously disturbed but both retain archaeological value.

4.0 Aboriginal Archaeology

4.1 Regional Archaeology

Aboriginal people have occupied the greater Sydney region for at least 20,000 years⁵. Dated rock shelter sites in the Blue Mountains and its foothills range from 15,000 and 22,000 years before the present⁶. Two dates ranging from between 10,500 to 12,000 ago have also been reported for an open camp site at Regentville⁷, whilst a shelter on Darling Mills Creek at West Pennant Hills has also provided a date of a little over 10,000. Two other open campsites in western Sydney at Doonside and Rouse Hill⁸ have also revealed later occupation with dates ranging from between 4,600 and approximately 6,000 years ago.

The earliest dated sites on the coast are located to the south at Burrill Lake (dated to 20,000 years ago) and at Bass Point (dated to 17,000 years ago). Both of these sites would have been occupied at a time when sea level was much lower and the area along the present coastline and their environmental context would have been an inland environment drained by streams⁹. It could be expected that many Aboriginal sites have been overlain by post contact occupation. Two other sites dated to around 7-8,000 years before the present comprise a sheltered midden at Curracurrang¹⁰ and an open campsite (containing a hearth) at the Prince of Wales Hospital in Randwick. The Prince of Wales Hospital site¹¹ comprised a deflated hearth and a small number of stone artefacts on a dune formation adjacent to an extensive series of swamps. Analysis of fats on a hearth stone at this site indicated that a freshwater fish meal had been cooked on the hearth.

Most sites in the Sydney region date to within the last 5,000 years and the majority of these are dated to within the last 2,500 to 3,000 years. Evidence suggests that the early Aboriginal occupation of the Sydney region was not intensive nor included large groups of people, and that around 5,000 to 6,000 years ago (when sea levels had stabilised at the present levels) more intensive use of the landscape by Aboriginal people began. It is also likely that particularly rich or varied environmental zones such as are exhibited along the northern side of Botany Bay will contain repeatedly occupied sites with larger or more extensive occupation deposits. The

⁵ The following discussion contains some summarisation from Dallas, M. & Tuck, D. 2005 *Aboriginal Heritage Assessment Long Bay Correctional Complex*. Report to BBC Consulting Planners Pty Limited on behalf of the NSW Department of Commerce

⁶ See Stockton, E.D. & W.N. Holland. 1974. Cultural sites and their environment in the Blue Mountains. *Archaeology and Physical Anthropology in Oceania*. 9:36-64. and Kohen, J.L. et al. 1984. Shaws Creek KII rockshelter: A prehistoric occupation site in the Blue Mountains piedmont, eastern New South Wales. *Archaeology in Oceania*. 19:57-93.

⁷ McDonald, J, Mitchell, P & Rich, E. 1996. A further investigation of site RS1 (45-5-892) at Regentville, Mulgoa Creek, Western Sydney. Report to Pacific Power, Sydney.

⁸ McDonald, J, Rich, E. & Barton, H. 1994. The Rouse Hill Infrastructure Project (Stage 1) on the Cumberland Plain, Western Sydney. *Archaeology in the North*. Proceedings of the 1993 Australian Archaeological Association Conference:259-293.

⁹ see Lampert, R. 1971 Burrill Lake and Currarong. Coastal Sites in Southern NSW. *Archaeology and Physical Anthropology in Oceania* 9: 226-235 and Bowdler, S. 1971. Bass Point. *The Excavation of a South East Australian Shell Midden showing Cultural and Economic change*. Unpublished BA(Hons) Thesis, University of Sydney.

¹⁰ Curracurrang is located in the Royal National Park.

¹¹ see Dallas, M., Steele, D. Barton, H. & Wright, R.V.S. 1997. POW Project 1995. *Randwick Destitute Children's Asylum Cemetery, Archaeological Investigation. Volume 2 Archaeology Part 3 Aboriginal Archaeology*. Report to South Eastern Sydney Area Health Service, Heritage Council of NSW and NSW Department of Health.

zones include rocky coast, headlands and tidal rock platforms, sheltered sandy embayments and an all-weather beach, hanging and dune swale swamps and coastal heath and woodland;

The distribution of Aboriginal sites is strongly related to bedrock geology and local topographic features, including elevation and water resources. The sandstone formations in the Sydney Basin contain painted and engraved art as well as occupation deposit under sheltered overhangs. Geology in this case directly determines or limits the regional distribution of these site types while other factors such as aspect, exposure to prevailing winds or frost, etc, determine the precise or preferred location of the sites within the sandstone formations. Sandstone surfaces were also used to form or maintain a working edge on stone hatchets. The grinding process was usually assisted by the use of water in whetstone fashion and these sites are usually adjacent to or near waterholes, rock pools or water courses. Similarly the types of stone available to Aborigines for use as raw materials in stone tool manufacture, is determined by geological features and processes. For example quartz may be found in conglomerate sandstone beds and may be available locally for stone tool manufacture. Silcretes and other fine-grained rocks would have had to be imported or traded into this area. The nearest known resources would have been in Tertiary aged deposits at Newtown in Sydney, at Plumpton, West St Clair and Riverstone on the western Cumberland Plain and along the coast around Wollongong.



Figure 4.1: View to west over rock platforms fringing Botany Bay from Bare Island access road. Photograph by Dallas.

Within this area, topography is unlikely to have influenced or limited the movement and activities of Aborigines in the past. Local sandstone formations while containing steep sided ridges and high coastal cliffs, did not limit access to preferred sites. Access could be gained along and between the ridges and elevated sites along these features are relatively common. The practice of regularly burning the scrub would have allowed easier walking through the otherwise densely vegetated slopes, dunes and/or creek lines. Variations in the slope or gradient of the ground surface acted as a constraint on some activities, particularly camping. Surfaces with slopes of less than 5% are likely to have been

favoured for camping. In broad terms, flat ground surfaces suitable for campsites will be found either on the flat tops of spurs and ridges [e.g., in saddles] or in valley bottoms along water courses. However open camp sites are extremely rare in the sandstone formations. Occupation sites are commonly found in sheltered contexts within sandstone overhangs where the

sandstone has formed or has weathered to produce sufficient cover from the elements or in open areas along sandy beaches at points sheltered from prevailing strong winds. Midden deposits are usually found relatively close to the shellfish resources, along sandy beaches or mangroves [pipis, mud whelk, mud or floating oyster and cockle] or within sheltered overhangs near the open tidal rock platforms of the headlands and embayments [oyster, whelk, abalone, limpet, cart-rut]. Shellfish and fish are known to have been carried considerable distances to preferred sites from the point of collection.

The most common and durable form of evidence that is available for understanding how Aboriginal people may have lived in the region in the past consists of flaked and ground stone artefacts. Most other items made and used from organic materials in the past have generally not survived over time. It can be postulated that the bulk of the tool-kit of the Aboriginal people of this area comprised non-durable items and that some of these (digging sticks, boomerangs, canoes, wooden spears, fishing nets and line) directly provided or contributed to the provision of the bulk of the food supply.



Figure 4.2: Prattent's engraving of Aboriginal Implements (1789)
 This image which depicts a stone tomahawk, bark basket and 'knife' (?) relates to material recorded during the voyage of Governor Phillip to Botany Bay in 1788.
 (SLV - Image Number: pb000236)



Figure 4.3: Aboriginal woman (with child) fishing in Botany Bay (1805)
 This watercolour (the painter is unknown) is taken from a series entitled *Natives of New South Wales; drawn from life in Botany Bay*. (ML SLNSW ML Ref: PXB 513)



Figure 4.4: Richard Browne's watercolour of Killigrand (c1810)
Image depicts an Aboriginal fisherwoman with the 'tackle' of the time - line (with float & hook) and a net carry bag.
(Image presented in Radford & Hylton, 1995: 21)

Stone tools are largely specialized items. Stone tipped spears and spear throwers are designed for particular methods of hunting and scrapers and hatchets for hide or wood working and for the production of spears, canoes and items used in the transport of food or water such as wooden containers, coolamons and dishes. Many others items made of plant fibre, wood, bark, reeds or rushes such as dilly bags, clothes and adornments did not require stone tools in their manufacture.

A number of changes over time in stone tool assemblages and the use of certain types of raw materials by Aboriginal people for tool manufacture are well documented through archaeological research. It is assumed that changes in the stone toolkit are likely to have been accompanied by and/or triggered through other significant developments in the broader social, spiritual, economic and technological lives of the traditional Aboriginal occupants of the region. Ongoing research is serving to confirm this likelihood.¹²

The most widely used terminology for the archaeological phases in south eastern Australia within what is currently known as the *Eastern Regional Sequence* are the *Capertian*, and the *Early, Middle* and *Late Bondaian*. The following sequence in the archaeological record is apparent.

The *Capertian* phase is essentially composed of large, heavy stone artefacts. Tool types include uniface pebble tools, core tools, denticulate stone saws, scrapers, hammerstones, some

¹² See also Attenbrow, V. 2002. *Sydney's Aboriginal Past: Investigating the Archaeological & Historical Records*. University of NSW Press, Sydney.

bipolar cores and flakes, and burins. The change from the *Capertian* to the *Bondaian* appears to have taken place some time after 5,000 years BP, and is defined by a noticeable shift in stone tool size, raw material use and in the range of raw materials utilised for tool production.

The three phases which are recognised as belonging to the *Bondaian* sequence are largely based on the timing of the introduction, and subsequent decline, of backed stone implements, as well as the increased use of bi-polar flaking techniques. Other technological innovations, which are evident during the *Bondaian*, included the introduction of ground edge implements (c4000 years BP), and the widespread use of shell fish hooks during the last 1000 years. Stone tool assemblages in archaeological sites containing a particular range of features can therefore be relatively dated.

The three phases of the *Bondaian* are summarised in the Table 4.1. The dates for each are only approximations but are derived from many dated archaeological sites on the east coast.

Table 4.1: Archaeological Phases for the Bondaian Period

EARLY BONDAIAN	
Date	5000 – 2800 years BP
Dominant raw material	Fine grained siliceous chert and silcrete
Characteristics	Features of the Capertian appear to have continued in many areas, but backed and edge ground implements were widely introduced and used.

MIDDLE BONDAIAN	
Date	2800 – 1600 years BP
Dominant raw material	Fine grained siliceous chert and silcrete. Increased use of quartz.
Characteristics	Increased use of microblades such as bondi points and an increase of bipolar artefacts. Few ground edge implements.

LATE BONDAIAN	
Date	Last 1600 years
Dominant raw material	Includes quartz with some uses of other raw materials.
Characteristics	Microblades including bondi points are absent, but eloueras and bipolar pieces are dominant in known assemblages. Edge ground implements are also more common. Bone and shell implements including fish hooks, occur at some sites

4.2 Local Archaeological Background

A search of the Department of Environment & Climate Change, Aboriginal Heritage Information Management System [DECC AHIMS] for the section of coastline extending from approximately Cape Banks north to Dunbar Head, and up to 4km of hinterland parallel with the coast, indicates that over 180 Aboriginal sites¹³ have been previously located, recorded and registered to date.¹⁴

Site types include rock engravings, open and sheltered middens, shelters with art and/or archaeological deposit, axe grinding grooves, open campsites or stone artefact scatters and burial sites. The majority of sites are located along the immediate coastal strip or Bay shores where there has been less intrusive development and less destruction of original land surfaces and sub-surfaces or buried deposits which might contain Aboriginal archaeological evidence. There are large areas of National Park, Reserves and Golf Courses within the broader area and further Aboriginal heritage sites are likely to be found, particularly subsurface in the many sand dune formations throughout the area¹⁵. Such land uses are relatively non-intrusive and undisturbed buried archaeological deposits including human burial sites could be expected were current land surfaces to be disturbed.

13 The registered sites identified in the DECC AHIMS site search include in certain cases multiple traits (for example rock shelters with midden and art); the database therefore specifies 180 individual Aboriginal entries and 209 traits listed within the parameters of the search for the area. This has been found to be a far more cumbersome system for recording Aboriginal sites than the previous method and has skewed and obscured site type densities and not simplified analysis of site distributions. Simply put, there are 180 site locations in the area, a few of which contain a number of extra elements which on their own might constitute an individual site and warrant separate registration. E.g., a sheltered overhang with archaeological deposit might also contain painted art on the roof or rear walls and may contain axe grinding grooves.

14 The coordinates for this AHIMS search were Easting 336000 to 342000; Northing 6237000 to 6255000.

15 e.g., hearths and artefact scatters have been unearthed during development at a number of places along this coastal strip.

Table 4.2: Aboriginal Cultural Heritage Sites in the South Eastern Sydney Region.

Description of Site Type	Number
Rock Engraving	70
Midden	42
Shelter with Midden	38
Shelter with Art	23
Open Campsites	16
Shelter with Deposit	8
Axe Grinding Grooves	5
Burials(s)	5
Contact Mission	1
Historic Place	1

The predominant type of surviving Aboriginal site in the area is rock engraving. These are beautiful engraved depictions of familiar items in the physical and spiritual world of the Aboriginal people who created them. They are situated along the various coastal headlands and bluffs occurring on the extensive, relatively even sandstone platforms. There are concentrations of such sites at La Perouse, Long Bay, Maroubra, Coogee and Bondi. Also relatively common are open and sheltered campsites that fringe the ocean foreshore in-and-amongst the principal beaches, bays and inlets.

Little archaeological research or detailed archaeological site investigation has been undertaken in the La Perouse area. A number of areas have been test excavated prior to development to the north and south of the La Perouse Headland, including areas along the Kurnell peninsula¹⁶. As previously mentioned the excavations at the Prince of Wales Hospital site have identified an area which proves the Aboriginal owners were utilising the site as early as 7,800 years ago. This was at a time when this particular landscape would have been much further inland from the coast and the Aboriginal people would have encountered an elevated inland swamp system far from the present coast line.

McIntyre¹⁷ test excavated a shell midden along Frenchmans Beach. Haglund¹⁸ test excavated the core of a dune upon which a Helicopter base station was to be installed, and monitored trenching for services along the main access road to the parking area. These works were in the vicinity of **AHIMS site # 45-6-2153, 45-6-2154 and 45-6-2155** near historic burials of Aboriginal

¹⁶ Mary Dallas Consulting Archaeologists 2001; 2003

¹⁷ McIntyre, S., Feb 1985. A Report on Protection Works Carried Out by the Randwick Municipal Council on an Eroded Campsite/Midden at La Perouse. Report to the Randwick Municipal Council.

¹⁸ Haglund, L. 2006. Report on test excavation at Cape Banks, La Perouse, within area to be used as a base for the Southern Region Life Saver Rescue Helicopter Service (Report to Landcom) & Haglund, L. 2007. Report on monitoring of the excavation of a service trench (DEC Consent #2586) leading to the newly established base for the Southern Region Life Saver Rescue Helicopter Service (Report to Landcom).

people within the Coast Cemetery. No additional or significant items were identified during these investigations.

4.3 La Perouse Headland Area

Within the immediate La Perouse Headland Area, there are a series of engraving sites and midden sites. Some are known to have been disturbed or destroyed or are otherwise no longer visible due to wind and sand erosion. The engravings located on the La Perouse Headland [see Figure 4.5, 4.6 and Table 4.3] are a series of individual depictions scattered across the rock platforms on the Headland. The recorded engravings have been accessioned onto the DECC AHIMS as separate engravings and given individual site numbers.

Over the years there have been numerous attempts to re-locate and record these engravings. The additional recordings have produced different results in terms of both the number and types of individual motifs which have been reported to be present at particular locations. Some interpretation of what is at each location [e.g., 'shark' vs Fish] has also differed between recorders. Finally, there are apparent errors in directions to get to individual engravings which have been compounded by later recorders using the earlier directions, identifying the problem with them but then providing different grid references. Consequently by 1989¹⁹ only one or two of the series of engravings could be relocated. It has been reported by different field researchers and local residents, that attempts to relocate most other elements of this site, have failed²⁰. It has also been reported that many of the known engravings [i.e., those recorded by Campbell in 1898] are covered by grass, faded, are barely visible or have been damaged or destroyed by the construction of roads.

4.4 Previous Investigations/Recordings/Significance Assessments

The well known Aboriginal engraving site of the whale and its baby located at the south western end of the La Perouse Headland has been the subject of a detailed site recording by the eminent Aboriginal art site conservationist David Lambert²¹. Mr Lambert is a DECC officer who specialises in rock art preservation and conservation. He undertook a night-time inspection of the location of the whale and calf location under halogen light and by non-intrusive means, recorded the engraving. None of the other engravings in Campbell's series were subject to the same detailed recording by Lambert at that time.

In 1989 Haglund undertook an assessment of the sites at the La Perouse Headland. She, like other researchers, had difficulty identifying all of the engraving site elements partly because of

¹⁹ Haglund, L. 1989. Assessment of the Prehistoric Heritage of Bare Island and the La Perouse Headland. Report to NSW NPWS & NSW PWD.

²⁰ Ibid & David Ingrey pres. comm. 9.2.07.

²¹ Lambert, D. & Biddle, R. 2001 *La Perouse Whale Engraving*. Report to NSW NPWS

the earliest recorder's²² ambiguous site relocation directions and partly because of subsequent site deterioration. She also believed there had been destruction of site elements due to road construction and landscaping. She made recommendations concerning more detailed investigation in particular areas²³ not all of which do not appear to have been undertaken.

As part of Haglund's study a significance assessment of the engraving sites was undertaken by Josephine McDonald. She compared the Headland sites with over 700 engravings sites in the greater region. McDonald identified the commonality/rarity of the sites at a local and regional level. She concluded that the whale and calf **AHIMS # 45-6-648**, is distinguished as being extremely rare in the region whereas the fish, 'tomahawk' and segmental marks **AHIMS # 45-6-649** and **-650** are relatively common and very representative [See Summary Statement of Significance].

4.5 Current Study - Field Inspections Findings

The current study included a number of surveys of the Headland to attempt to re-locate all previously recorded engravings, including those thought to be faded or to have been destroyed. The survey included verification of the recorded locations using a hand held GPS.

Table 4.3 lists the items previously recorded on the La Perouse Headland. **Figure 4.5** provides their locations. Both the table and the map indicate which of the recorded sites [i.e., those with DECC AHIMS site numbers] were identified/re-located during the current study and which ones were not found. In addition the area previously identified by Haglund as requiring further study was found to contain two possible engraved lines.

²² Campbell, 1898:24

²³ Haglund, 1989, see Figure 1.2

Table 4.3: Aboriginal Site Inventory La Perouse Headland

AHIMS #	Site Type/Content	Recorder[s]	Condition as at Jan.07	Grid Ref
45-6-648	Engraving of Whale and calf	Campbell, Mathews	Poor, exposed, sand- blasted natural weathering	*56336432E 6237435N +4233E 8010N
45-6-649	Engraving Fish and Tomahawk	Campbell, Mathews [shark and anvil shaped figure with deep V	Fish has been recently partly re-scored, by a vandal rubbing across part of the earlier Aboriginal engraving fish outline creating a smaller fish using only part of the original. The tomahawk remains clear and distinct.	+4233E 8910 *56336340E 6237469N
45-6-650	Engraving of a faint circle with 'peculiar segmental marks	Campbell McCarthy	Not relocated by the current survey , or by Haglund's 1989 survey. Note: Campbell's grid reference are the same for -649 and -651. The only other clearly visible marks at this point was a surveyor's mark.	+4233E 8910N
45-6-651	Engraving of two deeply cut Boomerang like marks, one with a reverse curve.	Campbell	Located within 10m of fish with Tomahawk.	+4233E 8910N *56336340E 6237475N
45-6-652	Engraving of shark? 13'6" long	Matthews	This figure may be a re-recording of the fish at 45-6-649. The shark is recorded as 130yards SW of Monument, and this is roughly the position of 45-6-649	~424 800 * see above for 45-6-649
45-6-653	Vertical Engraving of 1 kangaroo and 1 incomplete kangaroo	Sim 1963 and McCarthy 1983	Not relocated by current study. Reported to be located at South end of Frenchman's Beach 6' west of road to wharf. The rock is built over by Kiosk/Paragon Restaurant	+4233E 8010N
45-6-1144	Shell midden	R. Taplin	Reported to be located on a raised rocky point facing Frenchman's Bay [see above possibly on rock above the vertical engravings #45-6-653].	~4233E 8011N *56366455E 6237565N
45-6-1145	Shell midden	?	Not visited during current study. Reported to be located on slope from Anzac Parade to Conwong Beach and partly destroyed [Haglund 1989].	~4236E 8010N

* hand held GPS: current study

+Campbell 1898/DEC Site Form at 1:250000

~ DEC Site Form at 1:250000



Figure 4.5: Aboriginal site locations La Perouse Headland. (Note: Campbell's grid reference is the same for -649 and -650 and 45-6-650 was not relocated. Refer to Table 4.3)

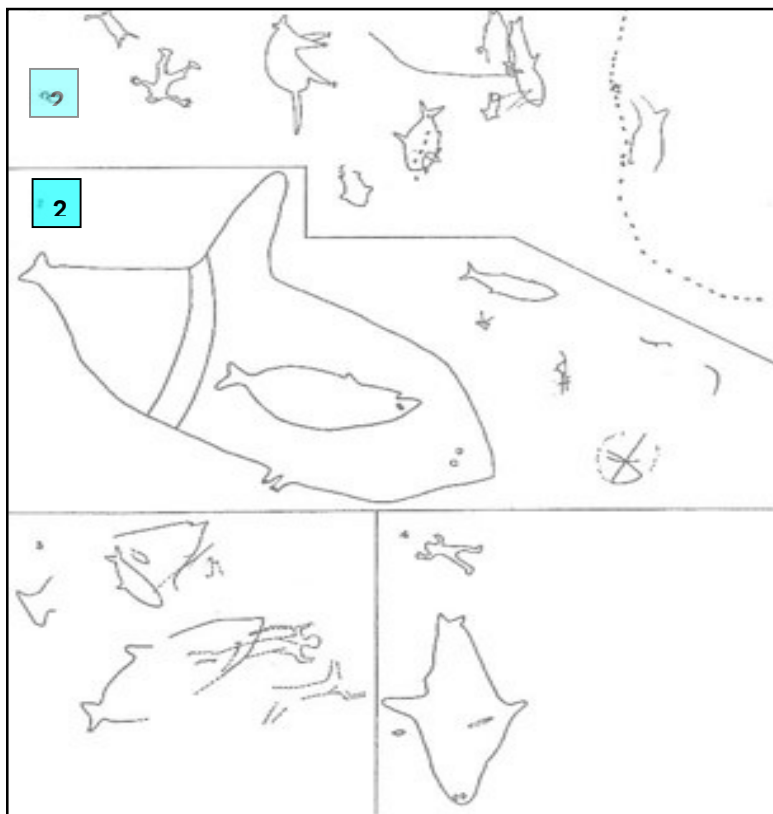


Figure 4.6: Campbell's recording of rock engravings at La Perouse Headland (Campbell 1898: Plate 3, Series 2, central group referred to as AHIMS #45-6-648 – 45-6-651).

The following record of the Legend of the Whales was published in 1995. The local Aboriginal community may hold additional or more current information on the legend.

The Legend of the Whales

The legend of the whales began back in the Dreamtime when the bay that we know as Little Bay was called Stingray Bay. One time while a whale was on his 'journey; to Antarctica he stopped in Stingray Bay and thought it would be a great resting spot for all the whales that were going on the journey. So he went and got all the whales and brought them back and scared all the stingrays out of the bay. When the mother whales gathered and had a meeting there were two baby whales and they were always causing havoc, so the mother whale said to them to go and play somewhere else ... So the baby whales went to play around a mound of rocks ... But they didn't notice that while they were playing the rocks were rising more and more out of the water until they formed what we know as Bare Island. The locals of the La Perouse community believe that the whales that went missing are Bare Island and the mothers are the mainland. And when you visit La Perouse and Bare Island remember this legend.

Dean Cooper & Kurt Martin-Baker in *Talking Lapa* (Office of the Board of Studies [NSW]. 1995. 43).

4.6 Field Verification of the Locations of the Recorded sites

Some of the engraving sites, including the well known Whale and calf [AHIMS # 45-6-648] along the southern side of the Headland, were first recorded many years ago, at least as early as 1898 by Campbell and Matthews and subsequently by F. D. McCarthy. McCarthy reproduces Campbell's figure but does not refer to Matthews recording, nor does he refer to Matthew' site location directions or individual descriptions. The depiction of the whale and calf appears to be the only engraving that all later recorders agree upon. Recorders subsequent to Campbell do not refer to all of the motifs Campbell recorded, or in the same way that he did, for example, a motif described by Campbell²⁴ as a large fish with a 'tomahawk' [AHIMS # 45-6-649] subsequently became 'a 7' long shark with an anvil-shaped figure with a large V on one side' when described by McCarthy²⁵. In addition to the above depictions Campbell describes two boomerang shaped lines [AHIMS # 45-6-651] and 'peculiar segmental marks [AHIMS # 45-6-650] whereas McCarthy only describes two indeterminate figures.



Figure 4.7: View to Cable Station from Whale engraving AHIMS # 45-6-648



Figure 4.8: View to south head of Botany Bay from Whale engraving AHIMS # 45-6-648

²⁴ Campbell 1899:6

²⁵ McCarthy 1983:Volume 1 Part 1:45

There are also fundamental problems with site location details. Most of the engravings in Campbell's series are referenced to point 180m [9 chains] from the Whale and calf but no direction is specified. The Fish and Tomahawk are supposed to be located at this distance whereas the current study identified the Tomahawk shape and a portion of an old engraved line which had been re-scored to form a smaller fish at less than 20 metres to the north of the Whale and calf. The idiosyncrasy of the Tomahawk depiction makes it unlikely to be a different engraving. In addition, the boomerang shaped figures were identified by the current study in the immediate vicinity [on the same rock] as the Tomahawk. [see Figure 4.9]. Campbell's description of the boomerang marks as including a 'reverse curve' is perfectly matched by the engraved lined at this location.



Figure 4.9 Engraving of Fish and "Tomahawk" AHIMS # 45-6-649 the fish has recently been modified and made smaller by re-scoring incorporating an older engraved line.

It would appear from the current field inspections that almost all the Campbell engravings are located in relatively close proximity to each other at the south western end of the Headland (**See Figure 4.5**).



Plate 4.9: General location of two engraved lines, first identified by David Ingrey. This is also the location identified by Haglund 1989 as requiring closer inspection

The area previously identified by Haglund as requiring further study was found to contain two possible engraved lines. This area is situated 20m south of the guard rail on Anzac Parade approximately 100m to the east of the Wale and calf engraving. Her original assessment of this area has been confirmed. David Ingrey has identified two possible engraved lines running approximately east west which may be part of a larger engraved figure. This area should be the subject of night time inspection/recording and consideration given to removal of adjacent encroaching soil and grass cover.

The recorded location of one of the shell middens **AHIMS #45-6-1144** was re-visited. Haglund reported this site to be largely destroyed by road works. However at this location there are disturbed pockets of shell deposits and patches of surface shell, which are disturbed but are clearly derived from a cultural deposit. The remains of the previous Kiosk known as the Paragon Restaurant, including a small stone walled garden bed and footings are present at this location. Midden material has been used in the garden bed. The access road to the wharf runs immediately adjacent and the asphalt may have covered midden deposit and possibly the remains of any earlier cobbled road.



Figure 4.10: Truncated shell deposit on sandstone platform at the far southern end of Frenchman's beach

AHIMS #45-6-653, a vertical engraving comprising two kangaroos, is likely to be in close proximity to, or below the midden on the vertical face of the rock platform. This engraving could not be re-located.



Figure 4.12: Vicinity of AHIMS # 45-6-1144 looking east to roadside retaining wall covering AHIMS # 45-6-653

AHIMS #45-6-1145, is a shell midden located to the east of the Headland at Congwong Beach. This site is outside current study area.

4.7 Findings

Despite the considerable uncertainty about the precise locations of the individual elements or depictions as specified and recorded by the earliest recorders, Campbell and Mathews, the current study has identified most of the originally recorded motifs. The Whale and calf, though difficult to see all of it from any single angle in bright sunlight, has deep peck marks and engraved segments. The boomerang shaped lines and, the 'Tomahawk' and fish were identified [motifs very similar to the original Campbell drawings] but are not in the location he specified. Only 'the 'peculiar segmented lines' could not be identified. The vertical kangaroo engravings are believed to be covered by a roadside random rubble retaining wall. The shell middens are variously disturbed but both retain archaeological value.

5.0 Historical Archaeology

5.1 Surviving Occupation Evidence

The earliest known European occupation of the La Perouse headland for six weeks in 1788 was by the La Pérouse Expedition but it is not well documented. Lieutenants King and Dawes reported that the French were well established on the peninsular with a garden, observatory and two partially constructed long boats enclosed by a stockade defended by two small gun emplacements²⁶. The location of the stockade is not known.

Cox et al in 2001²⁷ describe the French Garden and the remnants of the stockade as being remarked on by visitors to La Perouse in the early nineteenth century.

Until the building of the monument they served, together with the grave, as the last tangible link with the expedition. Joseph Lycett, remarks on the garden in 1822 (cited in Carleton, F.1993:5)²⁸. The garden was partially cultivated by the detachment of soldiers stationed at the Tower when the French ship Coquille visited the colony in 1824. The following year, Baron de Bougainville in command of the Thetis and Esperance on a voyage of 'discovery' noted the remnants of the stockade ditch (quoted by H. Selkirk op cit.:350)²⁹.

The references quoted by Cox et al (2001:21) above suggest that the locations of the gardens/enclosures shown on the subsequent maps should be regarded as having high potential to be associated with the French stockade and garden.

Kass³⁰ carried out a search for plans showing the stockade and/or the garden in 1989 without success. He speculated that the La Perouse monument may have been located over the site of the former garden. Higginbotham³¹ in 1989 speculated that the site is likely to be on the lawns in front of the Cable Station building given that Bougainville's 1825 description of the site (translated from the French) describes the site as still visible and cleared of trees. A small inlet and sandy beach at the foot of the slope afforded easy landing... 'three hundred yards north one gets a glimpse through the trees of the Gothic turret'.³² The historian Selkirk had concluded that Bougainville made an error and meant east not north.

Given that the best anchorage for their ships was being tucked into the south eastern corner of Frenchman's Bay where yachts and pleasure craft are now moored, it seems likely that the stockade was located between the site of Père Receveur's grave and the La Perouse

26 Selkirk H, 1918 'La Perouse and French Monuments at Botany Bay.' *JRAHS*. Volume I V/VII: 339

27 Cox H, Denny K, Fuller A, Jacobs C & Vale B, 2001 *The La Perouse Headland Site, A Meeting Place of Three Cultures, Conservation Management Plan for Botany Bay National Park* by University of Sydney, Faculty of Architecture.

28 Carleton, FRL 1993. 'An Eighteenth Century Conventional Franciscan Naturalist on the La Perouse Expedition: Pere Receveur (1757-1788).' **The Great Circle. Vol. 15/1 p5**

29 Selkirk, H, 1918. 'La Perouse and French Monuments at Botany Bay.' *JRAHS* Volume IV/VII

30 Kass T, 1989. *The Bare Island & La Perouse Monuments Historic Sites, La Perouse: An Historical Investigation*. Draft Final Report, Report prepared for the NSW National Parks and Wildlife Service.

31 Higginbotham 1989, *La Perouse and Bare Island Historic Sites, La Perouse, Conservation Plan, Historical Archaeology*: 6 refers to a quote in T Kass, *The Bare Island and La Perouse Monuments, Historic Sites – An Historical Investigation*, 1989: 11-12 (See p9-10 in the 1989 Draft Report by Kass) – quotes Baron de Bougainville, *Voyage of the Thetis and Esperance Round the World, 1824-6*, quoted in Selkirk, 'La Perouse': 352

32 Kass, 1989 Draft Report:10

Monument, at a place where moving the new/repared longboats to the water would be a short distance and assisted by the slope of the local topography. Alternatively the stockade/garden was located in one of the early known enclosure/garden sites north and south east of the Tower. (See the location of garden/enclosures in Figure 5.2). The Tower may well be around three hundred yards north of the most southerly, known garden enclosure sites, which would fit with Bougainville's 1825 description.

Most recently Doug Morrison and Professor Ivan Barko³³ have carried out some reconnaissance ground penetrating radar (GPR) profiles in the area from the monument to Pere Receveur's grave and some places in between. The data, which is available to NPWS was basically a test, which Morrison describes as working extremely well one metre down, in the sand and sandstone environment. It mapped buried manmade disturbances (e.g. buried pipes etc) and sedimentary accretion levels with ease,³⁴ but it did not locate evidence of the stockade or earlier gardens.

In a paper, not yet published, Doug Morrison and Professor Ivan Barko make some suggestions as to the possible whereabouts of the French garden/stockade based on previously untranslated writing, their study and their reconnaissance radar work. They found that both Bougainville (1825)³⁵ and Lottin (1824)³⁶ describe the location of the stockade as around 300 paces from the tower.

A search in a radius of around 300 paces from the tower using GPR technology may be the best chance to identify the site of the former stockade.

Morrison and Professor Barko, also discovered during their research, from early French writings that Joseph Lepaute Dagelet performed scientific physical experiments at the temporary observatory at La Perouse, which locates some of Australia's earliest scientific experiments on the La Perouse Headland.³⁷

Until the location of the stockade is definitively determined all excavation in previously undisturbed places on the headland carries the risk of disturbing remnants of the stockade or Frenchmen's garden sites. It is also likely that archaeological evidence related to this period would be ephemeral consisting of the remains of timbers, possibly garden edging and refuse pits or deposits.

33 Emeritus Professor Ivan Barko., Discipline: European Languages and Cultures.

34 Doug Morrison and Prof Ivan Barko have a science history paper currently being peer reviewed for publication in the Historical Records of Australian Science - pertaining to the science of the Laperouse expedition, the meeting with William Dawes of the first fleet.

35 Hyacinthe de Bougainville, *Journal de la navigation autour du globe de la fregate la Thétis et la corvette l'Esperance pendant les années 1824, 1825 et 1826*: publié par ordre du roi, sous les auspices du Departement de la Marine, Paris, Arthus Bertrand, 1837, Vol. I.:527. Translation by Henry Selkirk, see *La Perouse and the French Monuments in Botany Bay*, The Royal Australian Historical Society – Journal and Proceedings, Vol. IV, 1918, Vol IV, Part VII.:349-50 and Hyacinthe de Bougainville, "Notes personnelles. Notes détachéessur Port Jackson" in Bougainville, Archives personnelles depoeses aux Archives Nationales, Paris 155AP12, piece 45:29-31. Translation by Ivan Barko from a photocopy of the manuscript, provided by Professor Serge Rivière.

36 Lottin, Victor, quoted in François Bellec, *Les Esprits de Vaikoro Le Mystère Lapérouse*, Paris Gallimard, 2006:37-38. Translation by Ivan Barko.

37 Morrison and Barko had access to original Bougainville and other writing not previously published (in English or French).

Apart from the stockade/garden and Pere Receveur's grave, the other known early fabric related to the French occupation was a board nailed to a tree above his grave with the following inscription, translated from latin, provided by the office of the Consul General of France (Sydney):

'HIC JACET
L.RECEVEUR
EX F.F. MINORIBUS
GALLIAE SACERDOS
PHYSICUS IN CIRCUMNAVIGATIONE MUNDI
DECE D. DE LA PEROUSE
OBIT DIE 17TH FEBR., ANNO
1788³⁸

*Here lies Le Receveur, Priest from Monacal Minor Orders of France, Scientist from the round-of-the-World, Expedition led by de la Perouse buried the 17th of February in the year 1788.*³⁹

The board either decayed or was removed by indigenous people and Governor Phillip had an inscription engraved on a sheet of copper and nailed onto a tree near to or on the site of the French observatory. David Collins reports that the 'rain and the oozing of gum from the tree, soon rendered Phillip's plaque illegible'.⁴⁰ In 1824 the crew of a visiting French ship the *Coquille* left an inscription carved in a tree trunk of a eucalypt near the grave. The carved section of the trunk is currently held in the Musee de la Marine in Paris.

Pres de cet arbe repose les cendres du Pere Le Receveur, visite en mars 1824.
(Near this tree rests the remains of Pere Le Receveur, visited in March 1824.)

The subsequent occupation of the headland by the Watchtower and its troops and then the conversion of the Watchtower to a Customs Station and the construction of the Cable Station is comparatively well documented. In 1832 a 'skilling⁴¹ of 14 feet by 10 feet for boatman' was adjoined to the tower. (See Inventory No.1 Figure 14 for part of a stereoscopic view, which is the earliest known photograph of the Watchtower.) Additionally some small huts were erected east of the tower for the boatmen, shown in the 7th March 1832 plan signed by Surveyor Mitchell, identified by Kass⁴² as a large hut and two smaller huts, possibly privies. Two additional cottages were added in 1861 built by the boatmen. A well was sunk in 1863. The 1876 and 1878 Lands Department Plans shows numerous buildings including enclosures or gardens on the headland.

By 1889 there was a new building south of the tower called the 'Artillery Quarters'. The Cable Station was constructed with the loss of a garden and enclosure and some small outbuildings.

³⁸ FRL Carleton, op cit, 1993:23

³⁹ The French Consulate General (Sydney) states that the family name of the priest usually known as Receveur is in fact "Le Receveur". Family names bearing a "Le" being very common in Brittany (France).

⁴⁰ Selkirk H cites David Collins:347

⁴¹ A skilling is most likely to be a skillion-roofed addition.

⁴² Kass, 1989 Draft Report: 15

The cottage west of the Cable house seems to have survived for a while and a Cable Company Cottage had been constructed north east of the Cable Station building site by 1889.

A site plan with a composite of the readily available map information is provided (See Figure 5.1) to show areas with high archaeological potential (additional map searches may locate additional sites).

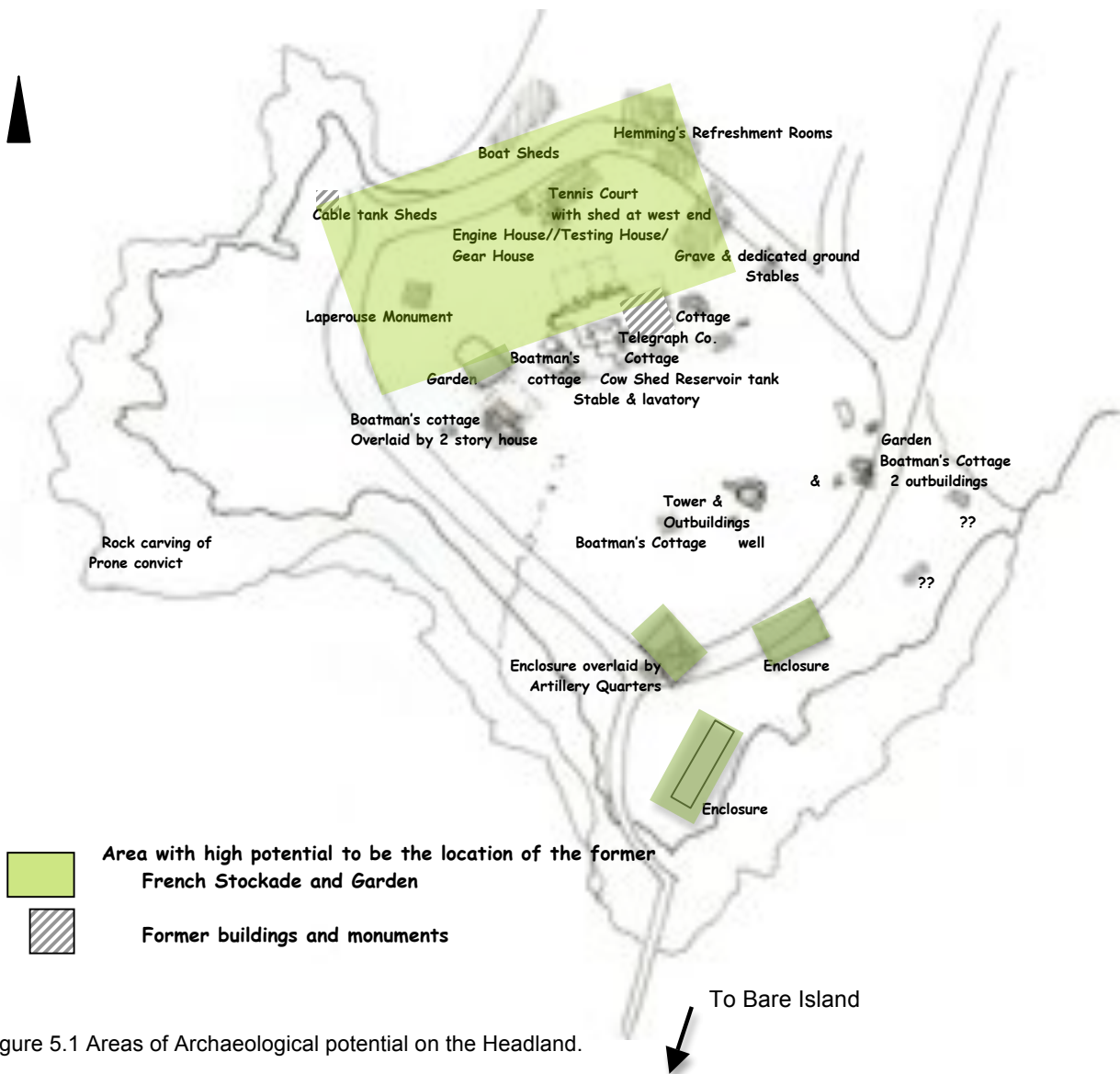


Figure 5.1 Areas of Archaeological potential on the Headland.

Table 5.1 Archaeological Sites/Elements Key (Sites identified by Higginbotham 1989 See Figure 5.2)

No.	Name	No.	Name
1	Tram Terminus	43	Boatman's cottage
2	Monument & drinking trough	44	Boatman's cottages, wood
3	Tram shed shelter	45	Boatman's cottage, wood
4	Cutting	46	Garden
5	Tram terminus	47	Military road
6	Snake Pit	48	Enclosure (Customs?)
7	Public conveniences	49	Boat davits
8	Stormwater drain outflow	50	Fisherman's boathouse
9	Stormwater drain outflow	51	Telegraph testing house, wood
10	Terraced area	52	Stables, wood
11	Rock-cut steps	53	Dwelling house & offices, wood
12	Road to Bare Island	54	Kitchens, wood
13	Circuit road	55	Garden, out-building
14	Levelled area	56	Boatman's cottage, wood, garden
15	Remains of slipway	57	Garden, out-building
16	Cable tank footings	58	Out-building
17	Slipway	59	Out-building
18	Stormwater drain outflow	60	Pond
19	Wharf & approach road	61	Outbuilding
20	Remains of wharf buildings	62	Out-building
21	Rock cut drainage trench	63	Garden
22	Rock-cut steps, other features	64	Enclosure
23	Circular sandstone feature	65	Edward hemming
24	Circular sandstone feature	66	Aboriginal Quarters
25	Circuit road, embankment	67	Cottage
26	Two storey building	68	Artillery quarters
27	La Perouse Monument	69	Old weatherboard residence, 1917
28	Tomb of Pere Le Receveur	70	Building
29	Embankment, boundary	71	Public school site
30	Cable Station	72	Enclosure?
31	Cable Station: Battery Room	73	Enclosure?
32	Cable Station: reservoir	74	Enclosure?
33	Sandstone blocks	75	Stables, E Hemming
34	Tower	76	Tennis court
35	Cistern & well	77	Jetty
36	Bare Island Fort	78	Buildings
37	Garden	79	Road reserve to jetty
38	Stockade	80	Top House
39	Flagstaff	81	Stable
40	Footpath	82	Lavatory
41	Building	83	Store room
42	Stables	84	Cow shed
		85	Out-buildings

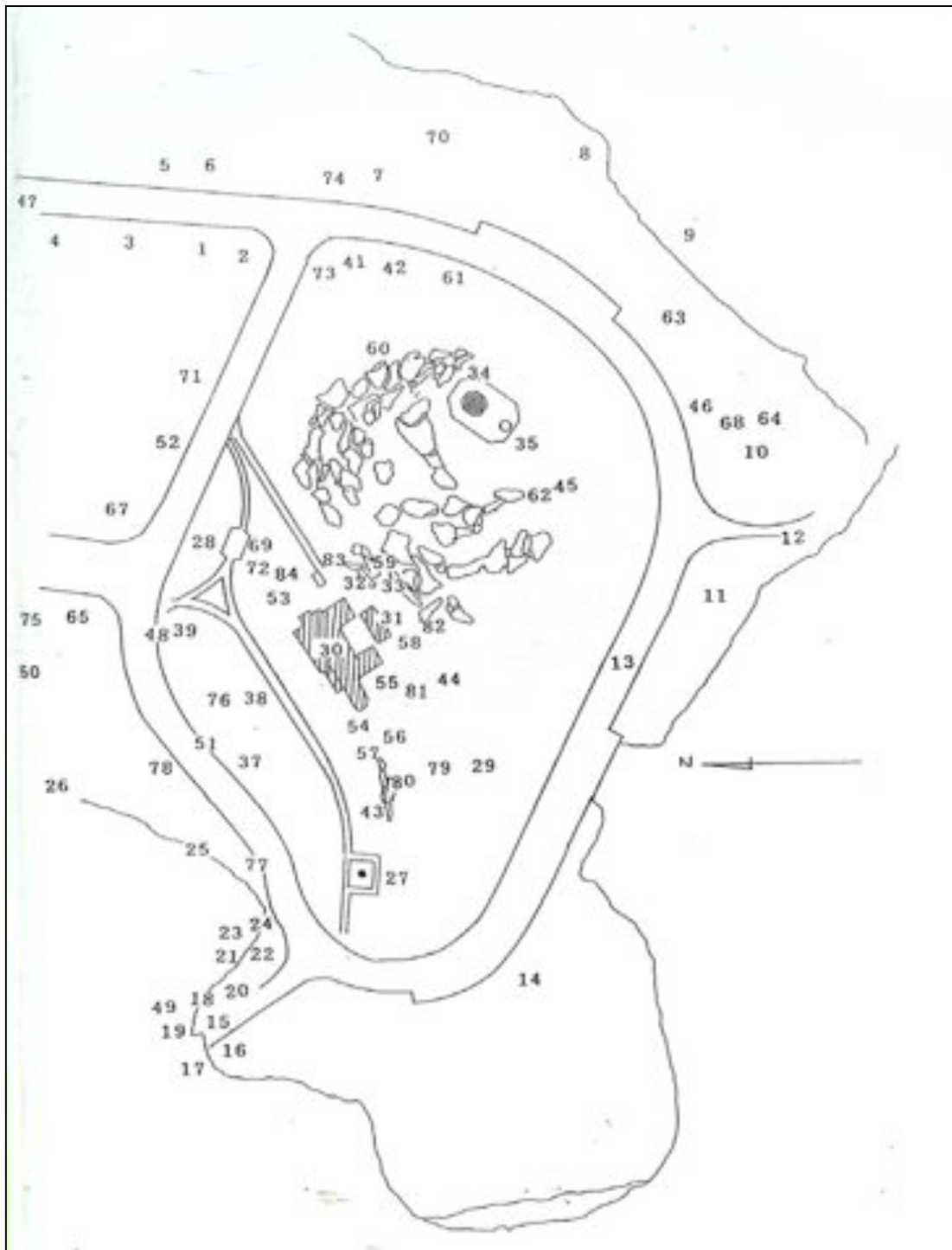


Figure 5.2 Archaeological sites/elements, La Perouse Peninsular, identified during the 1989 Higginbotham *Conservation Plan for Historical Archaeology* Appendix 3., prepared for The Department of Public Works.

5.2 Previously Identified Archaeological Sites

The following list of visible archaeological sites and items was identified by Higginbotham (1989: 63). The table includes the archaeological potential and significance as assessed by Higginbotham in 1989.

Table 5.2 Archaeological sites identified in 1989

Inventory No.	Item as recorded by Higginbotham.	Archaeological Potential	Assessed Significance
1.	Levelled area – possibly associated with the construction of the loop road.	Low	Local
2.	Stone monument & drinking trough	Low	Local
3.	Tram Terminus & Shelter shed	Low	Regional
4.	Cutting – for tram track at terminus	Low	Local
5.	Levelled area – southeast side of headland- possibly demolition rubble fill.	Low	Detracting
6.	Snake pit	Low	Local
7.	Public conveniences	None	Detracting
8.	Stormwater drain outflow	None	None
9.	Stormwater drain outflow	None	None
10.	Terraced area & traces of disturbance	None	Local
11.	Rock cut steps	None	Local
12.	Approach road to Bare Island Fort c.1881 construction	Low	Local
13.	Circuit road raised embankment.	None	Detracting
14.	Large partially levelled area	Low	Local
15.	Remains of slipway	Low	Local
16.	Footings of 2 cable tanks	Low	National*
17.	Slipway	Low	Local
18.	Stormwater drain outflow	None	None
19.	Wharf & approach road	Low	Local
20.	Remains of wharf buildings	Low	Local
21.	Rock cut trench	Low	None
22.	Rock cut steps & other features	Low	Local
23.	Circular sandstone feature	Low	Local
24.	Circular sandstone feature	Low	Local
25.	Circuit roadway raised embankment	None	None

Inventory No.	Item as recorded by Higginbotham.	Archaeological Potential	Assessed Significance
26.	Two storey building	None	Local
27.	La Perouse Monument	Low	International *
28.	Tomb of Pere Receveur	Low	International *
29.	Raised earthen embankment	Low	Local
30.	The Cable Station – is set on a partially levelled platform probably created by excavation.	Moderate	International *
31.	Cable Station outbuildings, battery room & store – as above	Moderate	International *
32.	Cable station outbuildings; reservoir tank or footings	Low	Local
33.	Sandstone blocks	None	Local
34.	Tower (Macquarie Watchtower)	High	National*
35.	Cistern or underground tank	Moderate	Regional
36.	Bare Island Fort	High##	National*
36-1	Bare Island Fort: wooden causeway		
36-2	Bare Island Fort: defensive "V" shaped ditch		
36-3	Bare island Fort: gates		
36-4	Bare Island Fort: guard house & lock-up		
36-5	Bare Island Fort: defensive wall, hoist & archway		
36-6	Bare Island Fort: laboratory		
36-7	Bare Island Fort: main entrance, steps & archway		
36-8	BIF: upper deck		
36-9	BIF: Barracks		
36-10	BIF: guard post		
36-11	BIF: gun emplacement		
36-12	BIF: command post		
36-13	BIF: gun emplacement		
36-14	BIF: communicating passageways		
36-15	BIF: Field of view of gun emplacement casemate		
36-16	BIF: opening above Casemate		
36-17	BIF: principal gun emplacement, casemate		
36-18	BIF: communication tunnel		
36-19	BIF: gun emplacement		

Inventory No.	Item as recorded by Higginbotham.	Archaeological Potential	Assessed Significance
	Bare Island Fort continued		
36-20	BIF: magazine & stores, & communication passage		
36-21	BIF: gun emplacement		

Key to discussion of the Assessed Significance in Table 5.2 above

* **Inventory item No.16 Footings of two cable tanks:** The assessment of the significance of the footings for the two cable tanks as 'National' appears to be based on their association with the submarine-cable laying and its operations. While the laying and operation of the cable was of international historical significance, the cable tanks, themselves are identified in this report as common technology of the time and are assessed as being of local significance based on their association with an internationally important event and because they are surviving evidence of the representative nineteenth century technology.

* **Inventory items No. 27 La Perouse Monument & No. 28 Tomb of Pere Receveur:** The assessment of the significance of the Tomb of Père Receveur and the La Perouse Monument as 'International' appears to be based on the associations with a historic event and with the ongoing French visitation. However, the items do not meet the changed criteria and thresholds for National and International significance. They are assessed in this report as being items of State significance for their historic associations with the La Perouse expedition, with de Bougainville and with the history of the Roman Catholic Church in Australia.

* **Inventory Item No. 30 The Cable Station & Item No. 31 Cable Station Outbuildings:** The assessment of significance of the Cable Station and its outbuildings as 'International' was arguable at the time (1989), as it represents a significant link in nineteenth century global communications. The Cable Station also has some national significance value as one of a small group of Australian Cable Stations associated with the adoption and expansion of telegraph technology and with the laying of submarine-cables, which transformed global communications in the nineteenth century. However, it does not meet the current threshold for items of national significance. This report identifies the Cable Station complex as being a place of State significance value. The Cable Station while an intact building does not retain any of the technology associated with the telegraph cable operation. The Cable Station and line was one of many world-wide from the 1840s to the early twentieth century. It was one of five stations in Australia and the Australian territories, a station at King Island being the first in the country. It is comparable with the Fremantle Station at Cottesloe (re-used as a school) in its size and associations. The cable technology and architecture has been assessed as being representative rather than exceptional.

* **Item No. 34 The Macquarie Watchtower** is a rare building form in Australia and has some national significance value as an early border protection post and as the first Customs Station in

Australia. However, the tower is no longer intact and does not meet the current threshold for national significance. It is assessed as being of State significance value in this report.

* **Item No.36. Bare Island Fort:** The archaeological potential for Bare Island Fort requires further investigation to determine the level of significance. This report finds that there is potential for the Bare Island Fort to meet the current national heritage criteria mainly for its historical and representative values and for its ability to demonstrate a rare technology. However, more research is required.

Higginbotham also identified a number of sub-surface items whose locations are not necessarily known. They were not included in Higginbotham’s Inventory of Visible Archaeological sites but were included in Appendix 3 of the Higginbotham 1989 report.

Table 5.3 Sub-surface items identified by Higginbotham with moderate or high archaeological potential include:

Inventory No.	Item	Archaeological Potential	Significance Assessment
37	Garden	High	International*
38	Stockade	High	International*
50	Fisherman’s boathouse	Moderate	<i>None provided</i>
65	Edward Henning’s House	Moderate	<i>None provided</i>
68	Artillery Quarters	Moderate	<i>None provided</i>
75	E Henning’s Stables	Moderate	<i>None provided</i>
36	Bare Island Fort	High	National+

Note: The inventory numbers in the Appendix are not the same as those in the list in the beginning of the inventory on page 63 in the September 1989 Higginbotham Report.

* **Item No. 37 Garden & No.38 Stockade:** Again items identified in 1989 as being of International and National significance would not necessarily meet the current National significance threshold. However, if the French Garden and Stockade were ever located and found to be undisturbed deposits, then the sites would need to be re-assessed against the National criteria and threshold.

6.0 Contextual Analysis

Preamble

The following analysis places the Macquarie Watch Tower, the La Perouse Cable Station and the Bare Island Fort within the context of the development of similar enterprises, structures and/or technologies in Australia and to a lesser extent internationally. Placing the items in the context of other similar or comparable items underpins the determination of the significance value of the items by establishing rarity and representational values and the comparative significance of the historical associations.

6.1 The Macquarie Watchtower

The watchtower form is typically associated with the construction of fortifications. Why the stone tower form was used at La Perouse c.1822 is not known. Terry Cass speculates that ‘...it was a more robust shelter against the strong winds and even more vigorous storms that swept across the peninsular from the southern seas...’⁴³ It is also possible that the tower form was selected for what was then a remote location as a precaution against an Aboriginal attack, from escaped convicts or from a foreign ship.

6.1.1 The First Redoubt

Early fortifications in the Sydney region included very few comparable towers. On arrival in Sydney, the commanders of the First Fleet spared little time in establishing fortifications to protect the chosen settlement site of Port Jackson. The first fortification is known as the ‘First Redoubt’ and it was positioned at what is now Macquarie Place (adjacent to Circular Quay). Established during the first year of settlement in 1788 as an interim measure, it was quickly surpassed by stronger fortifications at Dawes Point and was superseded within three years. Its original form is not well understood.

6.1.2 The Dawes Point Battery



The battery at Dawes Point was positioned where the southern pylon of the Sydney Harbour Bridge still stands. It had a much longer service life being in use until 1870

Figure 6.1: The Dawes Point Battery c1920s. Reproduced from National Library of Australia archives, Available; <http://nla.gov.au/nla.pic-an2383791>

⁴³ Kass T, 1989, The Bare Island & La Perouse Monuments Historic Sites, La Perouse – An Historical Investigation [Final Draft Report, June 1989]:5

when new technology increased the range of weapons and fortification could be moved to the harbour headlands.

The Battery at Dawes Point was the first substantial fortification in Australia and consisted of a crenellated, low sandstone building. The building had high points from which a watch could be kept, but did not possess a watchtower.

6.1.3 Fort Phillip

Fort Phillip was the first planned watchtower building in Sydney. Construction of the Fort commenced in 1804 at the site of what is now Observatory Hill. However, the Fort was never completed and construction ceased three years later in 1807. Sections of the wall still exist and were built into the walls of the Sydney Observatory. Plans of the Fort indicate the building was to be a hexagonal tower structure with crenellations.

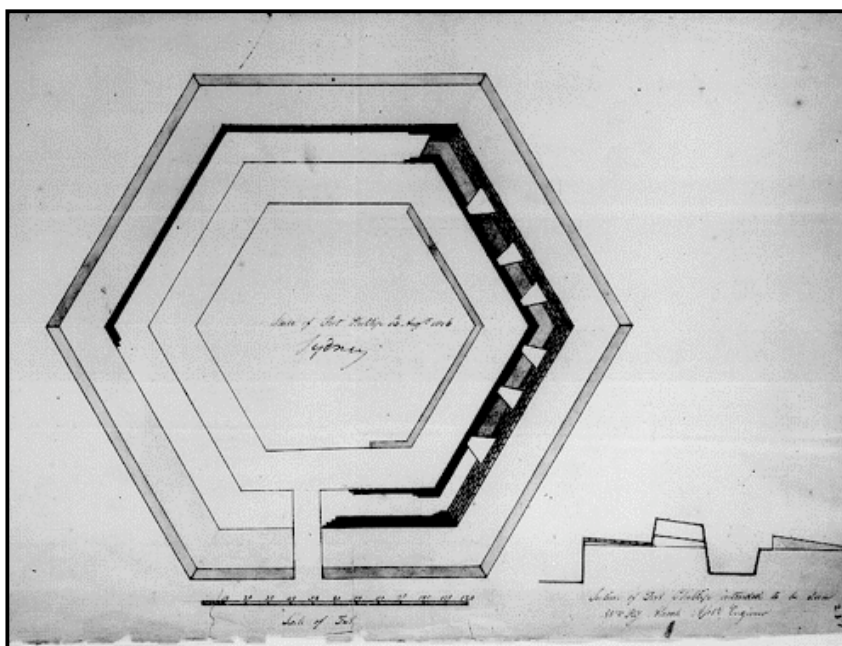


Figure 6.2: Plans of Fort Phillip – Reproduced from the Mitchell Collection Series 43. c1804.

6.1.4 Fort Macquarie

Fort Macquarie was the next fortification to be built in Sydney Harbour between 1817 and 1821. The fort was positioned in the site of what is now the Sydney Opera House on Bennelong Point and it contained what were Australia's first completed watchtowers. There were three towers incorporated in the Fort, one main, large tower and two minor towers. The largest of these was

very similar to the Macquarie Watchtower in form. It was a two storey octagonal sandstone building with crenellations. However, it was much larger than the Macquarie Watchtower.

The Tower enclosed a guardroom and storehouse. It was 90 feet in circumference and underneath there was a powder magazine capable of storing 350 barrels of gunpowder. The tower was designed to provide accommodation for a small military detachment with stores for the battery. One commissioned Officer with twelve men could be quartered there; with cover for no more than six additional men. The entrance featured a drawbridge (on the landward side) over a small channel leading to a gate beneath the tower.

The stone was obtained from the Domain by convict labour and the stonemasonry was typical of the best work in Macquarie's time. [http://www.lib.mq.edu.au/all/journeys/related/fortmacquarie.html]

The Macquarie Watchtower at La Perouse and the main tower at Bennelong Point both included a Gothic arched recessed entrance way. The main difference appears to be the quality of the workmanship, the size of the towers and the number and size of the crenellations. The c1865 photograph of the Fort Macquarie tower shows multiple crenellations (Between 18 – 26) whereas the 1850 drawing of the La Perouse Tower, prior to proposed alterations, shows only eight widely spaced crenellations.

It has been speculated that the design and engineering of Fort Macquarie under Francis Greenway was likely to be by Lieutenant John Cliffe Watts (46th Regiment) who was an assistant to Greenway at the formative design stage of the fort. Captain JM Gill (46th Regiment) was a military and road engineer till December 1817 when he was replaced by Major Druitt (48th Regiment).⁴⁴ It is possible that Druitt designed the Macquarie Watchtower.



Figure 6.3: Fort Macquarie c 1865. Photograph reproduced from Oppenheim P 2004.

⁴⁴ [http://www.lib.mq.edu.au/all/journeys/related/fortmacquarie.html]

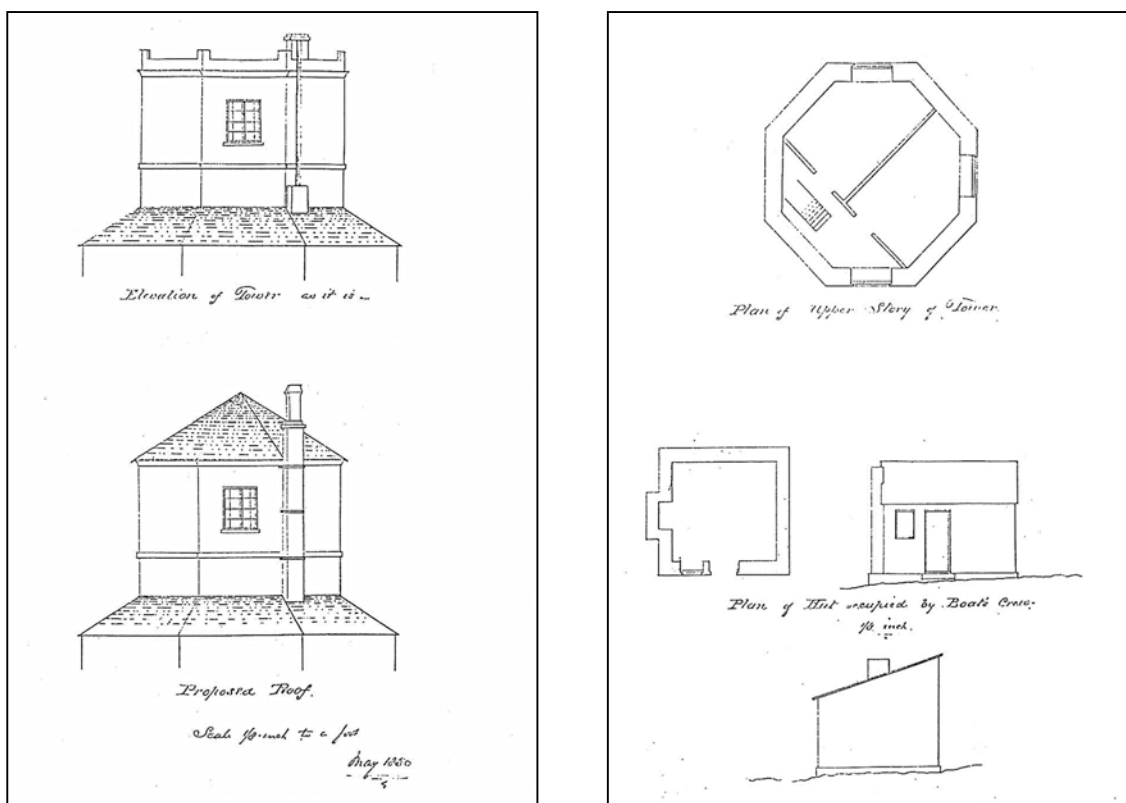


Figure 6.4: The Macquarie Watchtower, drawings showing the planned repairs and alterations to the tower in May 1850. Reproduced from SRNSW AO 2/653.

This image suggests that the crenellations only occurred at the junction of each facet and therefore there were only eight around the building parapet. The Department of Commerce added the additional crenulations during the 1961 works after the 1957 fire, which destroyed timber additions.

The next major fortifications of Port Jackson were not built until the 1850s, by which time the technology used as the basis of their design was so quickly surpassed that by the time the buildings were finished they were largely obsolete. The next two major fortifications during this period were the Macquarie Point Battery and Fort Denison. Of the two, only Fort Denison possesses a tower.

6.1.5 Fort Denison

Positioned in Port Jackson on what was a rock island outcrop to the east of Bennelong Point the Martello Tower of Fort Denison is still in good condition. Built in 1856, the fortification was only in service for fourteen years as technological improvements saw defensive batteries shifted outward towards the harbour headlands.

The Martello tower form was directly imported from Europe where it was first used at Mortella Point, Corsica in the 1790s and later reproduced by the British as part of its coastal fortifications.

The Martello Tower at Fort Denison was designed to house a large battery and as such served quite a different purpose to the Macquarie Watchtower at La Perouse. The Martello Tower is a more massive construction built to withstand bombardment. Both complexes included residential accommodation around the towers, although the Macquarie Watchtower initially only included accommodation within the tower. The Martello Tower tapers from a solid base, while the Macquarie Watch Tower maintains a constant circumference and the Macquarie Tower has crenellations, which the Martello Tower does not. The Martello towers are built to very specific architectural specifications and are not directly comparable to the Macquarie Watchtower form.

Subsequent fortifications in Port Jackson relied on the natural features of the headlands to provide an elevated position that allowed a good view of any ships that should enter the harbour, removing the need for purpose built watch towers. 6.1.6 Billy Blue's Tower



Figure 6.5 Martello Tower, Fort Denison. Photograph supplied by NPWS.

6.1.6 Billy Blue's tower

The other building in Sydney with a similar form to the Macquarie Watch Tower was Billy Blues Cottage, which was built c1810 by Governor Macquarie as a lodge by the gate to Government House on Sydney Cove.

'In 1811 Governor Macquarie appointed Billy Blue, one of Sydney's most colourful early characters to be "Watchman of the Heaving Down Place" and he was given "the powers of Constable" to enable him to carry out his task. He was also given the title "Water Bailiff" and required to keep an eye on smuggling activities in the harbour. To go with the job Billy Blue was given the use of a small hexagonal house in the Governor's Domain, to be near the Heaving Down Place, which was an area set aside for careening ships.⁴⁵

Blue is thought to have used the hexagonal cottage until 1817 when Macquarie gave him a grant of eighty acres on the north side of the harbour (McMahon's Point) where he moved with his family. 'Drawings of the cottage show it to be a hexagonal, two-storey, stone building with widely spaced crenellations very similar to the original crenellations of the Macquarie Watch Tower, although the roof appears to be an oval configuration with a central finial and it appears to be a more finely crafted building.



Figure 6.6: Billy Blues Cottage Retreat. Reproduced from Swords M 1979.

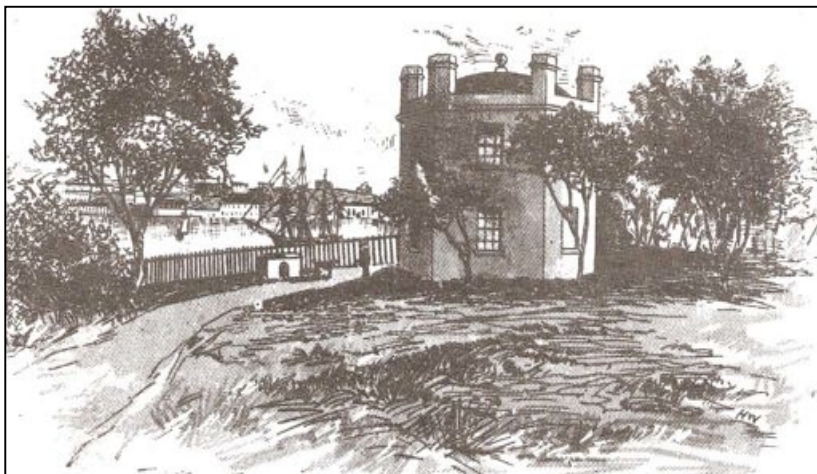


Figure 6.7: A slightly different view titled 'Billy Blues Point'. Reproduced from Swords M 1979.

⁴⁵ Jack Clark, Lavender and Blue on the North Shore; The 3 part article first appeared in *Afloat Magazine* and was reproduced on <http://www.catharsis.com.au/harboursights/index.html>

6.1.7 The Port Arthur Guard Tower

The crenellated, circular, sandstone guard tower constructed at Port Arthur in 1835 some 13-15 years after the construction of the Macquarie Watchtower was either designed by the Civil Engineering Department or the Royal Engineers. The tower is a more complex circular, Georgian Gothick design than the simple hexagonal form of the Macquarie Watchtower. The Port Arthur Guard Tower included a bracketed architrave beneath the crenellations and a pedimented porch over the gothic arched entrance.



Figure 6.8: Champ Street, Port Arthur c.1890 showing the Guard Tower on the right. [Reproduced from the cover of the Historic Environment Volume 16, No.3, 2002, *Islands of Vanishment*.]

6.2 Contextual Synthesis findings for the Macquarie Watchtower

The Macquarie Watchtower is a relatively late example of a fairly common architectural style associated with fortifications and with security that were built all around the world. However, use of round towers in Australia is relatively rare. The Macquarie Watchtower is the earliest known surviving, sandstone tower building in Australia. The 1804, Fort Phillip Tower was never completed. The 1810 Domain Gatehouse has not survived. Fort Macquarie built in 1814 was demolished in 1901 and replaced by new electric tramway sheds named the Fort Macquarie Depot, which were themselves demolished to make way for the Sydney Opera House in 1959.

In the context of the known round or octagonal tower constructions in the Sydney region and within the broader colonial context, the Macquarie Watchtower is the only known tower specifically constructed for border protection and the prevention of smuggling.

On 4th December 1829, Charles Wilson, the Director of Public Works in response to a query by Governor Darling wrote:

I beg leave to inform you that the Octagon Tower was erected about the year 1820 in lieu of Huts for Soldiers stationed there.

*A Corporal and Three or four men were placed there to report Vessels entering the harbour and to prevent Smuggling; they were removed three years ago and the Tower left unoccupied for some time when two Watchmen were sent to prevent further dilapidation.*⁴⁶

The lodge used by Billy Blue from 1811 to 1817 had a similar association by virtue of Blue's appointment as "Watchman of the Heaving Down Place" and "Water Bailiff". As Water Bailiff in particular he was required to keep watch for smuggling activities in the harbour. It is possible that Billy's occupation of the tower cottage gave Macquarie the idea of establishing a similar watchtower at La Perouse.

The Macquarie Watchtower went on to have a long association with the Customs service, from 1829 to 1903, which to some extent continued its original role. The association with the Customs service is important as it had a significant role in the formation of the Commonwealth of Australia. In *Smugglers and Sailors, the Customs History of Australia 1788-1901*, David Day says:

Early customs activity in Australia was directed at trying to stop smuggling of rum and other spirits in the new colony at Sydney. ...By the 1890s, colonial customs departments were collecting about 90 percent of government revenue. In 1901-2 (just before the Macquarie Tower ceased to function as a Customs Station), customs and excise revenue totalled 8.9 million pounds or 77% of the total Commonwealth revenue.

*In calling for Federal Government, Henry Parkes, a former customs officer, raised the vexatious question of internal customs barriers between colonies. Other major issues were alien migration, particularly by the Chinese and colonial defences... Federation at least along the borders was as much about the end of inter-colonial tariffs as it was about the unification of the colonies.*⁴⁷

Conclusions

Macquarie Watchtower is a rare building form within Australia and it is the oldest surviving sandstone tower in the country. Although the fabric has been damaged by fire and unsympathetic repairs it has a number of important associations, with:

- Governor Macquarie,
- Colonial border protection
- the Australian Customs Service, being the first Customs Station in Australia, and
- customs barriers between the colonies, which contributed to the call for Federation.

⁴⁶ Cass T, 1989, quotes J Jervis, 'Stone Tower', 282 State Archives box 4/2053 (box noted as missing since 1987)]

⁴⁷ Australian Customs Service – *Manifest Magazine*, November 1999 quotes David Day, 1992, *Smugglers and Sailors: The Customs History of Australia 1788-1901*. (See also www.customs.gov.au/webdata/miniSites/nov99/page17.htm)

6.3 The Cable Station

6.3.1 Telegraph

Building on the work of British inventor, William Sturgeon (1783-1850) and American Joseph Henry (1797-1878) with electromagnets, Samuel F B Morse (1791 – 1872) proved that signals could be transmitted by wire in 1835. He used pulses of current to bounce an electromagnet, which moved a marker to turn out codes on a strip of paper. The following year, the device was modified to emboss the paper with dots and dashes, signalling the invention of *Morse Code*. Morse gave a public demonstration of the technology in 1838, and the following year the first overland telegraph line running 21 km between London and West Drayton was opened in Britain.⁴⁸

This first overland telegraph was followed closely with many more across the globe. Britain, America and most of Western Europe soon possessed overland telegraph lines that linked with the principle centres of European commerce.⁴⁹ The next challenge was to connect these land cables by submarine cables stretching under the ocean.

6.3.2 Submarine Telegraph Technology

During the second half of the nineteenth century many companies were formed with the sole purpose of experimentation in methods of cable manufacture and laying that would provide reliable communication across bodies of water.⁵⁰

The technology needed for underwater transmission was different to that required for overland transmission and it was some years before a successful product was developed. The difficulty in creating a usable under-water cable stemmed largely from the need to find a suitable insulating product. Indian Rubber, the most obvious choice was not a viable option as it degraded quickly in a marine environment. The solution to the problem was found in the tree sap of the Gutta-Percha trees chiefly found in the islands of the Malay Archipelago. Werner von Siemens made the first experiments with the material as an insulating covering for cable and telegraph wires, which led to a considerable demand for the substance.⁵¹ However, unlike the Indian Rubber tree the Gutta-Percha tree was not easily tapped, with only about 1kg of latex being obtained from a tapped tree and 5kg being produced when the tree was completely felled. This was almost the undoing of the Gutta-Percha tree, with an estimated 70,000 Gutta-Percha trees felled for use as insulation for cable and telegraph constructions between 1846 and 1847.⁵²

48 Airey E 2005 *The Taming of Distance; New Zealand's First International Telecommunications*, Dunmore Publishing, Wellington, New Zealand.

49 Beauchamp, K. 2001 *History of Telegraphy*, Institution of Electrical Engineers, London.

50 Beauchamp, K. 2001,

51 See http://www.1911encyclopedia.org/Gutta_Percha

52 Beauchamp, K. 2001:137

The success of the Gutta-Percha insulated cables encouraged the laying of many more submarine telegraph cables. While submarine telegraph cables were laid across harbours and small water bodies, the first successful sea crossing was made across English Channel in 1851. By 1871 submarine cables had snaked through the oceans joining much of the northern hemisphere and reaching as far south as Singapore.⁵³

6.3.3 Closing the gap

The next year, in 1872, the communication lag between England and her colonies in Australia was shortened by a submarine cable from Banjoewangie, on the eastern tip of the Indonesian Island of Java to Port Darwin in Northern Australia. This line met with an overland cable, laid and financed by the South Australian Government that joined Port Darwin with Port Augusta, which was already joined to Adelaide by an overland cable. The Port Darwin-Adelaide cable was operational by August 1872; however, there were faults in the Banjoewangie cable. Running over a vulnerable seabed, prone to earth quakes and undersea volcanic activity the whole route was not operational until the 22 October 1872. The cable brought Australia to direct communication with London within twenty-four hours.⁵⁴

The operators and maintenance men had a tough job looking after the cables. Stations in Adelaide and Port Darwin were joined by lonely outposts along the inland route. A good part of the operator's time was taken in repairing breaks in the line caused by lightning. Lost travellers also knew that cutting the line would cause a linesman to eventually appear and Aboriginals took wire to use as hooks or insulators for sharpening weapons. When a break occurred, a man from each end would ride out until he reached the break – and fix it.

They seldom saw a new face – occasionally a colleague from an adjacent station, or a passing Aborigine. They were able to “talk” in Morse code to people in other stations and “eavesdrop” on cables between London and Australia which by-passed the Port Darwin Adelaide Line.

⁵³ Airey E 2005:4.

⁵⁴ Beauchamp K 2001:172

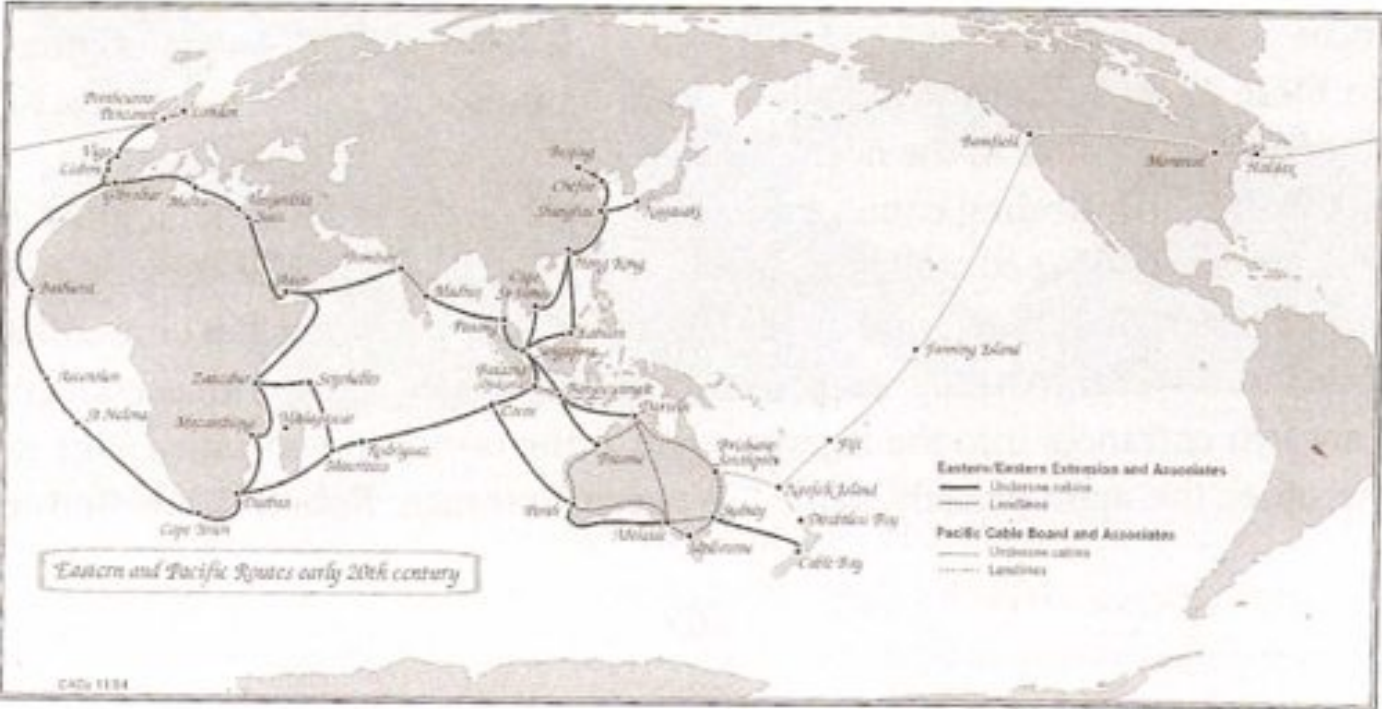


Figure 6.9 Eastern and Pacific Telegraph routes in the early 20th Century. Image reproduced from Airey E. 2005.



Figure 6.10 The landing of the Australian New Zealand telegraph cable on 11 February 1877. Reproduce from Miller M 1992.

6.4 The New Zealand Submarine Line

[La Perouse in Sydney's Botany Bay and the town of Wanganui in New Zealand's North Island]

With the completion of the Port Darwin/Adelaide Line, the other colonies of New South Wales, Queensland and New Zealand set about inserting themselves into the telegraphic loop. At the Inter-colonial Conference in 1872, the three colonies agreed in principle to the construction of a submarine cable line between New Zealand and New South Wales, and another between Normanton in Queensland and Singapore.⁵⁵

Between 1873 and 1875 negotiations commenced first with the Siemens Brothers (who had successfully laid the first deep sea cable between Calglari-Bon North Africa in 1857)⁵⁶ and then more successfully with the Eastern Extension Australasia and China Telegraph Company (EEACTC).⁵⁷

An agreement was finally signed on the 24th of June 1875 between the governors of New Zealand, New South Wales and EEACTC.⁵⁸ The cable was to be laid between Port Jackson where it could feed directly into the Sydney Telegraph Office and then to the town of Nelson on New Zealand's South Island.

However, both landing sites were found to be unsuitable due to the conditions of the harbour beds and the site of La Perouse in Sydney's Botany Bay and the town of Wanganui in New Zealand's North Island (from where it crossed to the South Island) were chosen as substitutes.⁵⁹

The connection of Sydney to New Zealand, when joined with the string of cables from England through Java down to Port Darwin, to Adelaide, to Melbourne, then onto Sydney and through Sydney to Queensland meant that London was now connected to all of her major colonies in the Southern Hemisphere.

6.5 Trans-Pacific Telegraph Cable

The desire to finish the connection of the British colonies with their homeland drove the development of a Trans-Pacific Cable Line to connect overland cables with undersea cables to circumnavigate the world. A number of routes were put forward and discarded.

The route that was finally agreed upon stretched from Bamfield (Canada) → to Fanning Island (in the Pacific) → to Suva (Fiji) → to Norfolk Island → to Southport (Brisbane) → (overland to) Sydney → and a branch from Norfolk Island to Doubtless Bay (New Zealand).⁶⁰

⁵⁵ Airey E 2005:41.

⁵⁶ Beauchamp K 2001:144.

⁵⁷ Airey E 2005:41.

⁵⁸ ibid

⁵⁹ ibid

The entire line was working by the 31st of October 1902. The completion of the line was celebrated in various capitals, initiated by the receipt of the 'first world-circling telegraph message' from Sir Stanford Fleming in Ottawa to Lord Minton, the Foreign Secretary in London, via Australia and South Africa.

6.6 Gentlemen in the Pacific Service

Operator training for the Pacific cable route took place mostly in Australia at a training school that was part of the Cable Station at Southport in South Australia.⁶¹ The cable operators were hired as very young men, and put through an intensive training regime from which only the best were selected. A typical advertisement for young operators in the Sydney Paper ran:

WANTED: Boys 15 years of age to learn submarine telegraphy and serve overseas. Apply Pacific Cable Board. 77 Pitt Street Sydney.⁶²

The cable operators trained in Australia were sent to stations along the Pacific line and were highly regarded so that an operator could easily find a job in any cable station in the world. They were discouraged from marriage, with the company threatening to terminate their employment if a certain age, rank or salary had not been obtained when the marriage was announced. As such the stations became a hive of social activity, although insobriety and insubordination were grounds for dismissal.⁶³



Figure 6.11: The first, temporary La Perouse Cable Station buildings, Engineers and staff in the foreground. 1877. Reproduced from Miller M, c1992.

⁶⁰ Scott, B.R. 1994, *Gentlemen on Imperial Service; A Story of the Trans-Pacific Telegraph Cable, Told in the Words of Those who Served*, Sono Nis Press, Victoria.

⁶¹ Beauchamp K 2001:176.

⁶² Ibid:177.

⁶³ Miller, M. 1992, *Gentlemen of the Cable Service; A pictorial History of Australia's Overseas Communications Service 1870-1934:7*

Station managers maintained a file on each employee’s performance with emphasis on the number of errors made by each operator in his job. Normal hours of duty were six or seven hour shifts six days a week.⁶⁴

Many cable operators stayed with the cable service for their whole working lives.⁶⁵

The following table shows the New Zealand sub-marine line in the context of international and Australian sub-marine cable developments. Australian connections are in bold typeface. (Reproduced from Table 5.1 K. Beauchamp, 2001, ‘History of Telegraphy’)

Table 6.1 Submarine Cable Developments

Year	Route	Length (km)	Company	Significance
1842	New York Harbour	-	-	
1849	Princess Clementine off Folkstone	3.2	South East Railway	
1850	Dover – Cap Griz Nez (Calais)	Failed	English Channel Submarine Telegraph Co.	
1851	Dover – Cap Griz Nez	44	Submarine Telegraph Co.	First successful cross channel cable
1852	Portpatrick-Donaghadee	Failed	English and Irish Magnetic Telegraph Co.	
1853	Portpatrick-Donaghadee	64	English and Irish Magnetic Telegraph Co.	
1853	Holyhead-Howth (Ireland)	Failed	English and Irish Magnetic Telegraph Co.	
1853	Dover-Ostend	130		
1854	Sweden-Denmark	58	Glass and Elliot Co.	
1854	Genoa-Corsica	145	Mediterranean Telegraph Co.	
1854	Corsica-Sardinia	26	Glass and Elliot Co.	
1855	Orfordness-Hague	185	R S Newall & Co.	
1855	Cape Breton-Newfoundland	137	Electric Telegraph Co.	
1855	Varna-Balaclava	550	Electric Telegraph Co.	
1855	Sardinia-Algeria	Failed	Mediterranean Telegraph Company	
1855	Italy-Sicily	9	Glass and Elliot Co.	

⁶⁴ Miller M 1992:7

⁶⁵ ibid:7

1856	Prince Edward Island-New Brunswick	20	Atlantic Telegraph Co.	
1857	England- Netherlands	184	Electric Telegraph Co.	
1857	Cagliari-Bon North Africa	290	Siemens Co.	First Deep Sea cable
1858	Ceylon-India	77	Glass and Elliot Co.	
1858	Valentia-Newfoundland	Failed	Atlantic Cable Co.	
1858	England-Hanover	45	Glass Elliot Co.	
1858	Australia-King Island	225	W T Henley	
1859	Folkestone-Boulogne	38	Glass Elliot & Co.	
1859	Toulon-Corsica	97	Glass Elliot & Co.	
1859-60	Suez-Aden-Muscat-Karachi	4991	Red Sea & India Telegraph Co.	Red sea route 1 st India cable
1861	Malta-Tripoli-Bengazi-Alexandria	2471	Glass and Elliot Co.	
1861	Newhaven-Dieppe	129	W T Henley	
1864	Gwador-Fao	2334	Indo-European Telegraph Co.	
1865	Biserte-Marsela	266	Siemens Co.	
1865	Fao-Bagdad-Bombay	2898	Indo-European Telegraph Co.	
1866	Valentia-Newfoundland	4495	Anglo-American Telegraph Co.	1 st successful cross Atlantic cable
1866	Buenos Aires-Montevideo	38	River Plate Telegraph Co.	
1866	Florida-Havana (Cuba)	280	International Ocean Telegraph Co.	
1868	Alexandria-Malta	1500	Anglo-Mediterranean Telegraph Co.	
1869	Brest-St Pierre	5300	French Atlantic Co.	
1869	Batabanō-Santiago	837	Cuba Submarine Telegraph Co.	
1870	Marseilles-Algiers	1300	Marseilles, Algiers & Malta Telegraph	
1870	Falmouth-Gibraltar-Malta	5632	Falmouth, Gibraltar, Malta Telegraph	
1870	Jamaica-Cuba	210	West India & Panama Telegraph Co.	
1870	Teheran-Black Sea-Karachi	11000	Indo-European Telegraph Co (Siemens' British Project)	
1870	Suez-Aden-Bombay	5787	British India Submarine Co.	

1871	Madras-Penang-Singapore	4190	Eastern Extension Co.	
1871	Singapore-Hong Kong	2737	Eastern Extension Telegraph Co.	
1872	Singapore-Jakarta-Darwin- (Adelaide)	6250	British-Australian Telegraph Co.	
1872	Buenos Aires-Valparaiso	130	River plate and Brazil Telegraph Co.	
1873	Puerto Rico-Jamaica	1120	West India & Panama Telegraph Co.	
1873	Rio de Janeiro-Maldonado	1652	Platino-Brasiliera Telegraph Co.	
1873	Lisbon-Madeira	1000	Brazilian Submarine Co.	
1873	Madeira-Cape Verde Islands	188	Brazilian Submarine Co.	
1874	St Vincent-Pernambuco (Brazil)	5386	Brazilian Submarine Co.	
1874	Ballinskelligs-Nova Scotia	4130	Direct United States Cable Co.	
1874	Barcelona-Marseilles	336	Direct Spanish Telegraph Co.	
1875	Valentia-Halifax	6000	Direct United States Cables Co.	
1876	Para-Demerara	1600	Central American Telegraph Co.	
1876	Sydney (La Perouse) – Nelson (New Zealand)	2272	Eastern Extension Telegraph Co.	
1877	Rangoon-Penang	1511	Eastern Extension Telegraph Co.	
1877	Aden-Bombay	3345	Eastern extension Telegraph Co.	
1879	Brest-St Pierre	4130	Cie Française du Télégraphe de Paris á New York	
1879	Durban-Mozambique-Aden	6822	Eastern & South African Telegraph Co.	
1880	Brest-Cape Cod-Porthcurno	5885	Cie Française du Télégraphe de Paris Ponyer-Quertia	
1880	Aden-Zanzibar-Durban	6822	Eastern Telegraph Co.	
1881	Cornwall-Causo	4155	Western Union Telegraph Co.	
1884	Halifax-Hamilton (Bermuda)	1700	International Cable Co.	
1886	Bathurst – Capetown	3680	African Direct Telegraph Co.	
1889	Dakar-Bathurst	9060	West African Telegraph Co.	
1889	Capetown-Mossamedes	2805	Eastern and South African Telegraph	
1889	Porthcurno-CapeTown	4745	Eastern telegraph Co.	Bore War Cable

1890	Bermuda-Halifax	1700	Halifax and Bermuda Cable Co.	
1890	Zanzibar-Mombasa	250	Eastern Telegraph Co.	
1891	Bactum-Borkum	338	British and German Governments	
1895	Paris-Manars	2639	Amazon Telegraph Co.	
1900	St Vincent-Ascension-St Helena-Capetown	7700	Eastern Telegraph Co.	
1901	Durban-Mauritius	2787	Eastern Telegraph Co.	
1901	Rodriguez-Cocas Island-Fremantle	6235	Eastern Telegraph Co.	
1902	Bamfield (Vancouver)-Fanning Island-Fiji-Norfolk Island	11480	Pacific Cable Board Telegraph Construction & Maintenance Co.	Trans Pacific Cable
1903	West America-Philippines	9864	Commercial Pacific Cable Co.	

Note: Australian landfalls are bold and the Sydney New Zealand line is highlighted.

After 1903 all the main centres were connected by above ground and sub-marine cables and only a few minor cable connections followed. More recently the communications technology has changed with the introduction of satellites and the sub-marine cables now carry fibre-optics. However, the ground breaking development within the expanding sub-marine cable network was the first successful sub-marine cable crossing of the English Channel in 1851, although it was only 44 kilometres in length. After 1851 as experience with the technology grew the projects became increasingly longer and more complex.

The first sub-marine cable laid in Australia was the Australia-King Island connection completed in 1858. At 225 kilometres it was the third longest sub-marine cable in the world at the time. The 1855, Varna to Balaclava connection was the longest at 550 kilometres and the 1857 cable from Cagliari to Bon, North Africa at 290 kilometres was the second longest.

By 1872 the connection from Singapore through Jakarta to Darwin (Adelaide) at 6250 kilometres was the second longest cable connection in the world at that time. The 1870 Teheran-Black Sea-Karachi route which was 11000 kilometres was the longest. The Singapore/Darwin route remained the second longest cable route in the world until the Durban-Mozambique-Aden line of 6822 kilometres was laid in 1879. The longest cable sub-marine route in the world up to 1903 was the 1902 connection between Bamfield (Vancouver) – Fanning Island- Fiji- and Norfolk Island at 11480 kilometres.

Within the proliferation of sub-marine cable routes during the nineteenth century the 1876 Sydney (La Perouse) – New Zealand (Nelson) route over 2276 kilometres was the 16th longest route in the world at the time. Its main significance was that the connection to New Zealand completed connection between Britain and its main colonies throughout the world.

6.7 Architectural Comparison of Cable Station Buildings

The following set of historical photographs shows a cross section of the Cable Station buildings, primarily from around the Pacific Ocean with some Canadian examples. The structures range from imposing public buildings to domestic scale residences. A range of Victorian period architectural styles and revivals of earlier styles is represented.



Figure 6.12: A 2006 view of the La Perouse Cable Station constructed between 1881 and 1882. (Photograph by D Tuck)



Figure 6.13: Cable Station at Suva, Fiji c1924. Photograph reproduced from Scott B R 1994.



Figure 6.14: Cable Station at South Port, Adelaide. The building on the left contained living quarters for several operators and the matron of the training school which was based at the station. The second building housed the manager's office, operations room and probationers quarters. (Reproduced from Miller M c1992: 19 [MLF384.10994])



Figure 6.15: Bamfield Cable Station and wharf at Bamfield Creek, British Columbia, c1918. On the hill to the left is the main building which housed the manager's office, operating room, bachelors' quarters, mess hall and telegraph room. Married staff cottages are on the right and in the centre front is the engine room. Photograph reproduced from Miller M c1992.

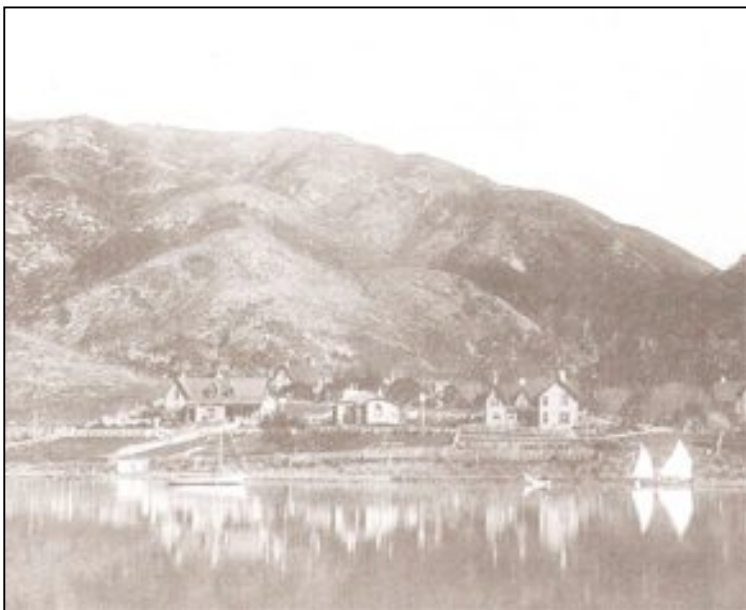


Figure 6.16: Cable Bay Station c1880s. Photograph reproduced from Airey E, 2005, *The Taming of Distance; New Zealand's First International Telecommunications*, Dunmore Publishing Wellington, New Zealand.



Figure 6.17: Fanning Island Cable Station c 1927. The view shows the rear of the main buildings, two single men's quarters and on the left a married officer's residence. Photograph Reproduced from Miller M c1992.



Figure 6.18: Pacific Cable Station at Doubtless Bay, New Zealand. Following the closing of the station, the two storey building was said to have been shifted to the Bay of Islands by barge and formed the main part of the Duke of Marlborough Hotel in Russell. Photograph Reproduced from Airey E 2005.



Figure 6.19: Cable Station Cocos Island .nd. Photograph reproduced from Airey E 2005.



Figure 6.20: Cable Station and Residence Norfolk Island c1930. Photograph Reproduced from Scott B R 1994.

Conclusion

Within the group of available historic photographs of Cable Station buildings, many stations are seen to be imposing public works structures, while others are modest residential style buildings. Except for the most basic domestic structures most of the buildings demonstrate Victorian period architectural styles. They all include a residential component, although many provide the residences as physically separate structures.

The function of the buildings is typically housed within a conventional architectural style and building envelope. Special adaptations associated with the function appear to have been the provision of large rooms to house switching equipment linked to generator rooms and cable runs. Other rooms are generally staff accommodation and amenities and most sizeable cable stations included a training facility.

The telegraph cable station buildings linked by submarine cables are associated with a particular technology first successfully used in 1842 that reached its zenith in the late nineteenth century and were replaced by the new switching and telephone cable technology in the early twentieth century. The La Perouse Station is a good representative example of a purpose designed telegraph cable station building and a substantial public works building, it demonstrates Victorian Regency and Victorian Mannerist stylistic influences. Within the cable station group, the La Perouse Cable Station is unusual for being designed to house two telegraph company operations in essentially mirror-imaged accommodation wings, with the companies sharing a central switching room. Within the group of Australian cable stations, the size and imposing façade of the La Perouse structure appears most directly comparable with the Cottesloe Cable Station building in Fremantle, which is thought to have been re-used as a school. It is not known whether the other Cable Station buildings in Australia associated with submarine cable landfalls at King Island, Darwin and Norfolk Island have survived. Like the other telegraph cable station buildings, the building envelope does not express the function externally, and the absence of equipment precludes technological comparison.

6.8 The Laperouse Monument & the Tomb

These are unique pieces associated with the last known landfall of the La Pérouse Expedition. They are early examples of monumental masonry that are representative examples of the masonry of the period. Comparison with other monuments is not relevant as the important aspect of the monuments is their historic associations, not the fabric itself.

6.9 The Historical Rock Carving

The three dimensional rock carving of a prone convict is rare within the Sydney coastline for being three dimensional. Substantial European carvings on the coastal headlands are rare with the exception of carvings at North Head associated with occupants of the Quarantine Station.

However, those carvings are typically text rather than three-dimensional objects. Unfortunately the origins and age of the figure at La Perouse are not known.

6.10 The Bare Island Fortress Context

Preamble: The system of coastal forts around Australia, has not been studied to date in such a way that comparison of forts and technologies in the various States and Territories and in the broader international colonial defence context can be made. The following discussion puts the nineteenth century forts in context with the historical development of a defensive fortress system in Australia and concludes that systematic State and Territory research is required to properly assess levels of intactness and significance.

6.10.1 The Late 18th and Early 19th Century Approach to Fixed Defence Works

Major General, Sir WFD Jervois described British defence works prior to the mid 1850s, as being “isolated works without reference to any general plan”⁶⁶. A similar approach occurred within the remote colonial outposts where until the 1860s defence was the responsibility of the Imperial government. Each Australian colonial outpost responded to perceived threats as they arose with coastal batteries and fixed defences within the limits of the local topography. Although fixed defences played an important role in the defence strategy for colonial Australia, they were always regarded as the second line of a defence strategy that was headed by the Imperial Navy.

Among those defensive sites the development of a fortresses system, centred on the major coastal port settlements resulted in a scatter of massive constructions. They were typically located on dramatic coastal sites, as attack by a foreign power was only considered possible at some point along the coast. However, within the earliest fortress constructions, some early forts such as Fort Dundas on Melville Island (c.1826) and Fort Wellington in Raffles Bay in the Northern Territory (1827-29) were not part of the broader defence response. They were associated with isolated colonial settlements and protection from local threats, and were often short lived.

6.10.2 Australia's Earliest Known Fixed Defence Works

The earliest known fixed defences constructed in Australia were for the protection of Sydney. The First Redoubt (1788-1791) was located near what is now Macquarie Place, the Dawes Point Battery (1788-1870) located in the area that is now the southern Pylon of the Harbour Bridge. A Battery at Obelisk Point was established in 1801⁶⁷ and a single rock cut battery at Georges Head established c.1801. The Georges Head Battery was intended to engage ships

⁶⁶ Major General Sir) WFD Jervois – Governor of South Australia, 1880, in a Lecture titled *Defences of Great Britain & Her Dependencies*, Pamphlet No.6, E Spiller, Government Printer, North Terrace, Adelaide bound in a Volume titled Pamphlet No.1. (ML DSM/042/P514):12

⁶⁷ Oppenheim P, 2004, *The Fragile Forts, The Fixed Defences of Sydney Harbour*. Appendix 1 Current Status of Former Sydney Fortifications at 2004. Note Oppenheim does not mention the c.1801 Georges Head Battery, but it is mentioned elsewhere.

attempting to enter through the heads into Sydney Harbour. However, the Georges Head Battery was not actively garrisoned and soon fell into disrepair.⁶⁸

Subsequent fixed defensive positions were typically in response to a perceived threat from a foreign power. During the Napoleonic Wars, invasion by the French was considered a real possibility. For example work began on Observatory Hill in 1804, to construct Fort Phillip⁶⁹, which was intended to defend the colony from rebellious convicts but it was also in response to a possible French attack.

In a comprehensive work titled *History of the Colonies of the British Empire*, published in London in 1843, the author, RM Martin, states that:

... there are no military posts in any part of the colony of NSW; there are only three military works viz. Fort Macquarie, Dawes Battery and Fort Phillip. The two former are situated on two points of land in the harbour of Port Jackson, forming the entrance to Sydney Cove and were erected for the safety of the shipping.... Fort Phillip... situated to command the whole of the Town of Sydney – now only used as a telegraph station.

6.10.3 The Impact of Technological Change

Improvements in technology in terms of the force and range of armaments ultimately proved to be a greater threat to the survival of early fixed defences than any foreign incursions. Fort Phillip was demolished by the 1850s. It was followed by the construction of Fort Macquarie in the location of the current Opera House (1817-1821) demolished in 1901, which together with the Dawes Battery was to defend the inner harbour. Fort Denison (1856) and the Kirribilli Battery (1856-1870) were constructed after a 'scare' in 1839, when American warships arrived unannounced in Sydney Harbour, and construction commenced in the atmosphere of insecurity arising from the relative proximity of the Crimean War (1853 -1856) and the associated threat of a Russian invasion.

In a lecture delivered in the 1880s, Jervois, a British defence expert, described the period 1856 to 1875 as one of '*rapid and constant changes that took place in matters relating to ships, fortifications and artillery, and in the art of war generally about this period – a period of transition in the science of war which has no equal in history*'.

He elaborated:

The designing of the defences was conducted under circumstances of unprecedented difficulty. To meet the new conditions of warfare, new principals had to be evolved, and novel modes of construction had to be tried and introduced. The introduction of rifled ordnance of immense range rendered it necessary that the defence of a place should embrace a widely extended area, whilst the

⁶⁸ www.environment.nsw.gov.au/nswcultyreheritage/Sydney_defence_heritage.htm

⁶⁹ Martin RM, in *History of the Colonies of the British Empire*, 1843 p414 lists Fort William as the first Fort built in NSW in 1804. It is possible that 'Fort William' was an alternative name considered for Fort Phillip, or the name mentioned by Martin was an editorial mistake.

*enormous increase in the power of the artillery, caused by the armour plating of ships, rendered indispensable a corresponding increase in the power of resistance of fortifications, and the adoption in many places of iron walls and iron shields. The necessity for introducing mechanical appliances for working the gigantic armaments required for the forts also rendered essential an entire alteration in the details of the old system of fortifications.*⁷⁰

6.10.4 Early Defence in Victoria

As early as 1846, Victoria, which had only been settled in 1835 was recognised as a valuable, but defenceless isolated colony. A dispatch of June 20th 1846 was sent from Governor Gipps to Gladstone pointing out the defenceless condition of the Port. Signed by JF Palmer, the Mayor, the dispatch pointed out that Melbourne contained 2,333 houses; 10,954 inhabitants; exports £400,00 of produce; imports £100,000 of British merchandise and that the military stationed in the town did not exceed fifty four persons.⁷¹

The discovery of gold in Victoria and the formal separation of Victoria from NSW by an Act of Parliament passed on August 5th 1850 to form its own colonial government together with the threat of invasion associated with the Crimean War (1853-1856) gave the Victorian colonial government impetus to examine its defences.

6.10.5 Sir Peter Scratchley



In 1860, Victoria applied to the British Government for the services of an officer of the Royal Engineers to superintend the erection of defences. The then 'Captain' Peter Scratchley was given command of a detachment of engineers to erect in Melbourne defence works, which he had designed. Arriving on the *Ottawa* on 13 June 1860 he reported on 21 September with detailed recommendations for the defence of Melbourne and Geelong. He advised the provision of batteries in Hobson's Bay and at the Heads. He considered the estimated cost of £81,200 as 'insignificant ... when compared with the revenue, wealth and security of the people of the colony', but lack of funds prevented almost all construction.

Figure 6.21 Sir Peter Scratchley (photograph reproduced from a Power Point Presentation on the web by Mike O'Brien titled *Sir Peter Scratchley Engineer, Soldier, Administrator*, [<http://www.consuleng.com.au>] No source given).

⁷⁰ Jervois 1880:13

⁷¹ FP Labilliere, Vol 2 *Early History of the Colony of Victoria*, published 1878 by Sampson Con, Marston, Searle & Rivington, Crows Building 188 Fleet St, London.:292-3

Scratchley served as engineer and military storekeeper and became honorary Lieutenant Colonel of the embryonic Victorian Artillery. He supported a delegation to form a unit of Victorian volunteer engineers and the corps was formed at a meeting on 7 November 1860. He returned to England late in 1863.⁷²

In 1865 Scratchley wrote a report on South Australia's defence. He became a major on 5 July 1872, brevet lieutenant colonel on 20 February 1874, lieutenant colonel on 1 October 1877, and brevet colonel on 20 February 1879.

6.10.5 The Theoretical Framework for Imperial Security

A remarkable pamphlet published by Sir John Colomb in 1867 had established the theoretical framework within which imperial security policy was debated and formulated for at least the next half a century. Colomb advocated the creation of a comprehensive network of bases to secure refuelling coal supplies (around the world) including only one base in Australia, at King Georges Sound in Western Australia. To the list of essential bases he added several whose security was a matter of somewhat less urgency and he included Sydney in that group. His analysis is thought to have been the first systematic consideration of the problems associated with imperial defence in the age of steam.⁷³ Subsequent Imperial defence and trade security measures were taken within the context of that policy.

The 1869 Cardwell Reforms of the British Army meant that British Garrison troops were withdrawn from the colonies including from Australia in 1870. The British Colonial Office insisted that the wealthier colonies, NSW and Victoria should pay their own defence costs. Although there was obviously some concern about defence after the withdrawal of the main body of British troops in August 1870 the public outcry was limited to some newspaper editorials identifying the opportunity for some serious thinking about the defence of the colonies. The colonies were still mired in inter-colonial rivalries and squabbling over free trade, tariffs and a customs union.⁷⁴

In 1871 a number of new defences were built in New South Wales, focused on defending the outer harbour. These were at Outer and Inner Middle Head, Georges Head, South Head, Steel Point, and Bradleys Head. However, as the range and firepower of armaments continued to be increased into the 1880s, those defensive sites were almost immediately obsolete.

By 1876, in Sydney and Melbourne the effectiveness of the volunteer forces, the local naval defense, and the fortifications built in the previous decade, had become the subject of press criticism and public inquiry. The most damning was Victoria's Royal Commission on the Volunteer Forces, which found the Volunteer Force ineffective, inadequate and insufficiently

⁷² Scratchley, Sir Peter Henry, 1835-1885, Biographical Entry, *Australian Dictionary of Biography Online* <http://www.adb.online.anu.edu.au/biogs/A060113b.htm>

⁷³ Ed. K Neilson & G Kennedy, 1997, *Far Flung Lines: Essays on Imperial Defence in Honour of Donald McKenzie*, Routledge, Taylor & Francis Guys:33-34

⁷⁴ J Grey, 2008, *A Military History of Australia*, 3rd Edition, Cambridge University Press, Melbourne:41

trained, and the fixed and naval defenses undermanned, outdated and allowed, through neglect, to reach a ruinous condition.

6.10.6 A New Immediacy to Threats

Kitson⁷⁵ identifies two major ‘war scares’ which had a profound effect on British imperial defence planning and on the planning and implementation of Australian coastal defence. The first scare occurred in 1877–78 and the second in 1885; on both occasions Britain came close to declaring war with Russia. Both were a result of Russia’s expansion eastwards, first into the Eastern Mediterranean, which threatened the Suez Canal in Turkish Egypt, and then north of India to Vladivostock and the Sea of Japan.

The war scares, which previously would have taken a month or more to be communicated to Australia, were made immediate with the completion of telegraph connections between Australia and Europe. This immediacy involved Australians in European ‘scares’ on a day-to-day basis through inflammatory press coverage.

It was in the context of the build up to the war scares that in December 1876 the governors of Australia’s eastern colonies jointly asked the Colonial Secretary in London to appoint an expert military engineer to advise on their defense. Two military advisers, Sir William Drummond Jervis and Sir Peter Scratchley were appointed and sent out in 1877 to draw up defensive schemes for major and outlying ports.⁷⁶ It was in the British government’s interest to make sure that colonial defences had an imperial focus, rather than serving local interests. Among other things, Scratchley and Jervis:

- Developed volunteer military systems, which included a garrison artillery component;
- Proposed modifications for existing fortresses and batteries;
- Proposed and designed new fortresses throughout Australia and New Zealand;
- Built more batteries in the 1890s.

⁷⁵ M Kitson, 2001, An Attack on Melbourne: a case study of the defence of Australia’s major ports in the early 1890s [Article reproduced on the web with permission from the *Journal of the Australian War Memorial* No.35, December 2001.]

⁷⁶ *ibid* (no page numbers on the web article)

6.10.7 Sir William Francis Drummond Jervois (GCMG, CB 1821-1897)



Figure 6.22 Sir WFD Jervois. (Photograph reproduced from a Power Point Presentation on the web, by Mike O'Brien titled *Sir Peter Scratchley Engineer, Soldier, Administrator*. Photo not sourced. See www.consuleng.com.au/Scratchley)

Jervois had been employed from 1852 to 1855 in designing and directing the fortifications protecting the harbour at Aldernay. This led to his employment in the Fortifications Department in London where he remained for nearly twenty years. He wrote:

*The greatest stride ever taken in the construction of defenses by the British Government was between the years from 1856 to 1875, during which period our principal naval arsenals and dockyards both at home and abroad were fortified on an extensive and comprehensive scheme calculated to meet the altered conditions of modern warfare.*⁷⁷

Scratchley returned to Australia on 8 March 1877 on the *Tudor* to join Sir William Jervois in advising the colonies on their defences. Scratchley had remained interested in Australian defences and claimed to have constantly considered Melbourne's security. He considered Port Phillip the only harbour of importance in Victoria and believed that a combination of forts and torpedoes making up outer and inner defences was required.

6.10.8 Scratchley & Jervois Advise the Australian Colonies

Jervois, aided by Scratchley's fortification design expertise, delivered reports to each colony on his findings, recommending the upgrading or construction of new fortifications at a number of locations. Scratchley was subsequently engaged by several colonies to design their fortifications. In his 1877 report he noted that at Port Phillip Bay torpedoes were in place but batteries of artillery were still essential. After Jervois was appointed governor of South Australia, Scratchley became Commissioner of Defences in 1878, covering in time all the six colonies and New Zealand. His plans were again thorough and were largely implemented, so that by 1885 he was satisfied that 'the colonies, excepting New Zealand, are fairly well prepared'.

Unlike Jervois who appears to have been more flexible in addressing changing technology, Scratchley's ideas showed little change after the 1860s. Although he was aware of technological improvements he appears to have been focussing on providing recommendations

⁷⁷ Jervois, 1880:12

within the limitations of the colonial budgets. As a result the Australian defence installations were typically at least twenty years behind the most up-to-date defence techniques and technologies elsewhere.

Despite their evolution over twenty years, during which weaponry rapidly improved, innovation was controlled at first by Scratchley and subsequently by the Colonial Defence Committee. Works typically comprised an inner defense of a minefield protected by guns and illuminated at night, and also an advanced defense of guns and of lights covering the approaches to the inner system.

The clearest statements of Scratchley's views appear in the evidence he gave to the 1881 Commission on New South Wales Defences, of which he was Vice-President and Chairman of the Military Sub-Committee. The Report of the Military Defence Inquiry Commission of NSW 1881 included five military officers as members. The Commission was considered the most efficient local committee to that time.⁷⁸ It comprised:

- Sir Peter Scratchley, Consulting military engineer to NSW, Vic, Qld, SA, Tas & NZ ;
- Colonel Anderson CMG, commanding the local forces of Victoria;
- Colonel Downes RA, commanding the local forces of SA;
- Colonel Richardson, commanding the local forces of NSW
- Colonel Roberts, commanding the artillery forces of NSW.

Scratchley believed that land defence works should protect key ports; he advocated torpedoes for offence and submarine mines for defence. He supported the obstruction of shipping channels and argued for a limited number of paid volunteers, sufficient to repel minor invasions. At sea he favoured floating batteries and unarmoured gunboats with heavy guns, and opposed expensive ironclad vessels.

Scratchley retained his belief that threats to Australia were limited, because of British sea power he saw his central problem as the establishment of an effective force 'at the lowest possible cost': volunteer land forces with able officers were needed only 'to meet the contingency of the naval defences not meeting the enemy at sea'. Opposed to excessive copying of the system of training of British regulars, he argued that Australian fighting conditions would be different. He was well aware of the difficulties of obtaining support for defence spending'.⁷⁹

⁷⁸ C Kinloch Cooke, 1987:152

⁷⁹ Scratchley, Sir Peter Henry, 1835-1885, Biographical Entry, Australian Dictionary of Biography Online <http://www.adb.online.anu.edu.au/biogs/A060113b.htm>

Between 1885 and 1906, defenses for major Australian ports and coaling stations were developed along Scratchley and Jervois' lines. The scale of attack considered possible, and consequently the power of the defense needed to match it, had been defined by Jervois as an attack, or raid, mounted at long range, by one or more cruisers, which made a "descent upon the coast" or operated against commerce. 'A squadron intended for such an operation would probably consist of three, or four, vessels, one or two of which might possibly be ironclads.'⁸⁰

Scratchley considered Sydney and Newcastle the only places in NSW likely to be attacked and consequently the only places that required special local defences. In the opinion of Scratchley and Jervois: - Botany Bay 'the north shore of which is only about 3-4 miles from the outskirts of Sydney, with which city it is connected by good roads', was a high risk.

They recommended that 'Botany Bay should be defended with a view to preventing its occupation by an enemy, but the construction of batteries at Broken Bay (the mouth of the Hawkesbury) was unnecessary'.⁸¹ They also considered that special local protection should be provided for Newcastle⁸² because of its wealth and potential as a re-coaling stop for enemy shipping.

Scratchley considered the general system of defence best suited for NSW would be found equally applicable to the other colonies, modifications being admitted to suit local circumstances & requirements.⁸³ The following table summarises the recommended approach for each State.

6.10.9 New South Wales

NSW - SCHEME OF DEFENCE (C. Kinloch Cooke, 1987 <i>Australian Defences and New Guinea from the Papers of Sir Peter Scratchley</i> - for more details of recommended armaments See pp151-152)	
LAND DEFENCES	South Head; reconstruct & improve existing batteries Middle Head & Georges Head: reconstruct & improve existing batteries Middle Head & Georges Head; new batteries Bear (<i>sic</i>) Island; enclosed work with barracks Signal Hill: enclosed works with barracks
BARRACKS & RETRENCHMENTS	Barracks at South & Middle Head Entrenchments at South Head, Middle Head & Georges Head
TORPEDO DEFENCES	Port Jackson - submarine mines; observing and firing stations for both channels at the entrance Newcastle - ditto across the entrance

⁸⁰ Kitson, 2001 (no page numbers)

⁸¹ C Kinloch Cooke, 1987, *Australian Defences & New Guinea from the Papers of Sir Peter Scratchley*, London, McMillan & Co. & New York:147

⁸² *ibid*:145-147

⁸³ *ibid*:154

	Botany Bay – mechanical mines near the entrance
MILITARY FORCES	Regular Artillery Corps Volunteer Militia (Auxiliary) Torpedo Corps Volunteer Militia Field Force Police to furnish Mounted Corps
NAVAL DEFENCES	Iron clad vessel – to protect coast and commerce Torpedo boats for harbour defence Naval Brigade & permanent crew for iron clad & torpedo boats

6.10.10 Victoria

VICTORIA - SCHEME OF DEFENCE (C. Kinloch Cooke, 1987 <i>Australian Defences and New Guinea from the Papers of Sir Peter Scratchley</i> - for more details of recommended armaments See pp167-168)	
LAND DEFENCES	Heads – Enclosed work on Point Nepean - Batteries & a keep at Queenscliffe West Channel – Enclosed work, keep and torpedo depot at Swan Island South Channel – Fort on Shoal
TORPEDO DEFENSES	West Channel & South Channel – lines of observation & contact mines with light booms to be laid across channels. Torpedo defences to be in the charge of military authorities.
MILITARY FORCES	Regular Army Corps Coast and Volunteer Auxiliary Torpedo Corps Field Force to repel landings
NAVAL DEFENCES	Cerebus (an existing ship) Swift Gun Vessel

The works in Victoria were delayed owing to improvements in the manufacture and modes of mounting ordnance, resulting in modifications to the original scheme and insufficient money was voted in the 1879 – 1882 period.⁸⁴ However, ultimately Port Phillip Bay in Victoria was heavily fortified and has been described as ‘the most heavily defended British Port in the southern hemisphere at the time’.⁸⁵

⁸⁴ Kinloch Coke, 1987:168

⁸⁵ Kitson, 2001 (No page numbers)

6.10.11 South Australia

In South Australia, defence recommendations were restricted to the defence of Adelaide, which was considered more open to seaward attack and defence was more dependant on naval means than the other colonies. The first gun battery was completed at what became Fort Glanville. A swift gun vessel had been purchased in 1882.

The focus of the defence strategy changed over time as Port Adelaide’s outer harbour shifted to the north and a second fort, Fort Largs became the more important battery as the strategic importance of Fort Glanville declined.



Figure 6.24 Fort Glanville 1931 (Photograph reproduced from www.consuleng.com.au/Scratchley, A Power Point Presentation by Mike O'Brien titled *Sir Peter Scratchley Engineer, Soldier, Administrator.*)

SOUTH AUSTRALIA - SCHEME OF DEFENCE (C. Kinloch Cooke, 1987 <i>Australian Defences and New Guinea from the Papers of Sir Peter Scratchley</i> - for more details of recommended armaments See pp177-181)	
LAND DEFENCES	A Battery of 3 heavy guns near Semaphore and 2 guns three miles north
	Extend the military road
	Electro contact torpedoes across Fort Creek
	Maintain a force to man defenses and oppose landings

6.10.12 Queensland

QUEENSLAND - SCHEME OF DEFENCE (C. Kinloch Cooke, 1987 <i>Australian Defences and New Guinea from the Papers of Sir Peter Scratchley</i> - for more details of recommended armaments See pp189)	
LAND DEFENCES	Brisbane at Lytton – enclosed work with defensible stockade on Signal Hill
TORPEDO DEFENCES	Brisbane River at Lytton – observation & electrical contact mines
	Maryborough – Gun barge and torpedo boats
	Rockhampton – Gun barge and torpedo boats & Naval brigade at the above places

6.10.13 Western Australia

In Western Australia the need for fortified coal depots on the routes of British commerce was recognised as being particularly important. Perth, Fremantle and Albany were identified as the only places requiring protection.

WESTERN AUSTRALIA - SCHEME OF DEFENCE (C. Kinloch Cooke, 1987 <i>Australian Defences and New Guinea from the Papers of Sir Peter Scratchley</i> - for more details of recommended armaments See pp 199 - 202)	
LAND & NAVAL DEFENCES	King Georges Sound requires guns in suitable works at the Heads, submarine mines at the entrance to the harbour, defence gunboats and torpedo boats.
	Princess Royal Harbour – Guns in batteries on shore, Torpedo boats, Gun boats and Submarine mines

6.10.14 Tasmania

In Tasmania, Scratchley believed that a hostile occupation of Tasmanian harbours could only be prevented by naval means.

TASMANIA - SCHEME OF DEFENCE subsequently Revised (C. Kinloch Cooke, 1987 <i>Australian Defences and New Guinea from the Papers of Sir Peter Scratchley</i> - for more details of recommended armaments See p 219)	
LAND DEFENCES	Hobart - Queens Battery: reconstruction, improvements & repair Kangaroo Bluff: enclosed work with Barracks One Tree Point, Alexandra Battery: enclosed work with Keep
	Launceston – Pig Island River Tamar, enclosed work
TORPEDO DEFENCES	Hobart – observation and electro-contact mines River Tamar – electro contact mines
MILITARY FORCES	Regular army detachment Volunteer (Auxiliary) Garrison Artillery Torpedo Attachment Volunteer Field Force to repel landings at Hobart & Launceston

REVISED SCHEME for TASMANIA

REVISED SCHEME OF DEFENCE for Tasmania by Scratchley (C. Kinloch Cooke, 1987 <i>Australian Defences and New Guinea from the Papers of Sir Peter Scratchley</i> - for more details of recommended armaments See p 220)	
	Launceston – a defensive position to be established at Brown Bluff, nine miles from Launceston.
	Hobart – complete the Alexandra Battery and Kangaroo Bluff
	Queens Battery, which is in good order, should be used to guard the torpedo defences.

6.10.15 Response to the Recommendations

Although the Jervois/Scratchley reports were the result of intercolonial cooperation, the results were largely aimed at improving the defence of the individual colonies, rather than being a broader concept of defending Australia. This cooperation was a significant precursor to closer defence cooperation in the decades leading up to Federation in 1901 and the creation of a single defence force. In New South Wales, the fortifications that were built or altered included Bradley's Head Upper Battery, Middle Head Lower Battery, Middle Head Inner Battery, Georges Heights Battery, Georges Heads Battery, Bare Island Fort, Henry Head Battery, Fort Scratchley and Wollongong Harbour Battery. In Victoria, they included Fort Queenscliff, Swan Island Fort, Fort Nepean, Fort Franklin, Popes Eye Shoal Fort, South Channel Fort, part of Fort Gellibrand and Warrnambool Battery. In Queensland, they included Fort Lytton, No 4 Battery at Townsville, Kissing Point Battery and Magazine Island Battery. In South Australia, the reports resulted in the construction of Fort Glanville (1878-81) and Fort Largs (1883-84) on the coast near Port Adelaide. In Tasmania, they included Bellerive Battery and Kangaroo Bluff at Hobart.⁸⁶

The second 1885 'scare' prompted British moves to protect coaling stations, and also to set up the Colonial Defence Committee, which annually reviewed and advised on all imperial defenses.

However, Kitson⁸⁷ points out that by 1885 Australia's ports were no longer the soft targets for a small, but sudden, Russian raid that they had been just seven years earlier. Supplies of coal were still obtainable as none of the fixed defences for coaling stations earmarked by the Carnarvon Commission in 1882 had been completed, and coaling stations established after 1882 had no defences, even on paper. Thus, although Newcastle had incomplete defences, those of Singapore were inadequate and other ports such as Greymouth in New Zealand remained undefended. Nevertheless, a considerable portion of the defences proposed for all the major ports, under schemes by Jervois and Scratchley, were partly complete. As soon as news of the crisis was received, these works were manned and some vital submarine minefields prepared, or laid.⁸⁸ An attacking squadron risked finding itself held up sufficiently long enough to be overtaken by any pursuing British naval force, and bottled-up in the restricted waters of Port Phillip Bay or Sydney Harbour.

What might have worked in 1878 was unlikely to have succeeded in 1885 considering the defences that were then available.

⁸⁶ M Kitson, 2001 (No page numbers)

⁸⁷ *ibid*

⁸⁸ *ibid*

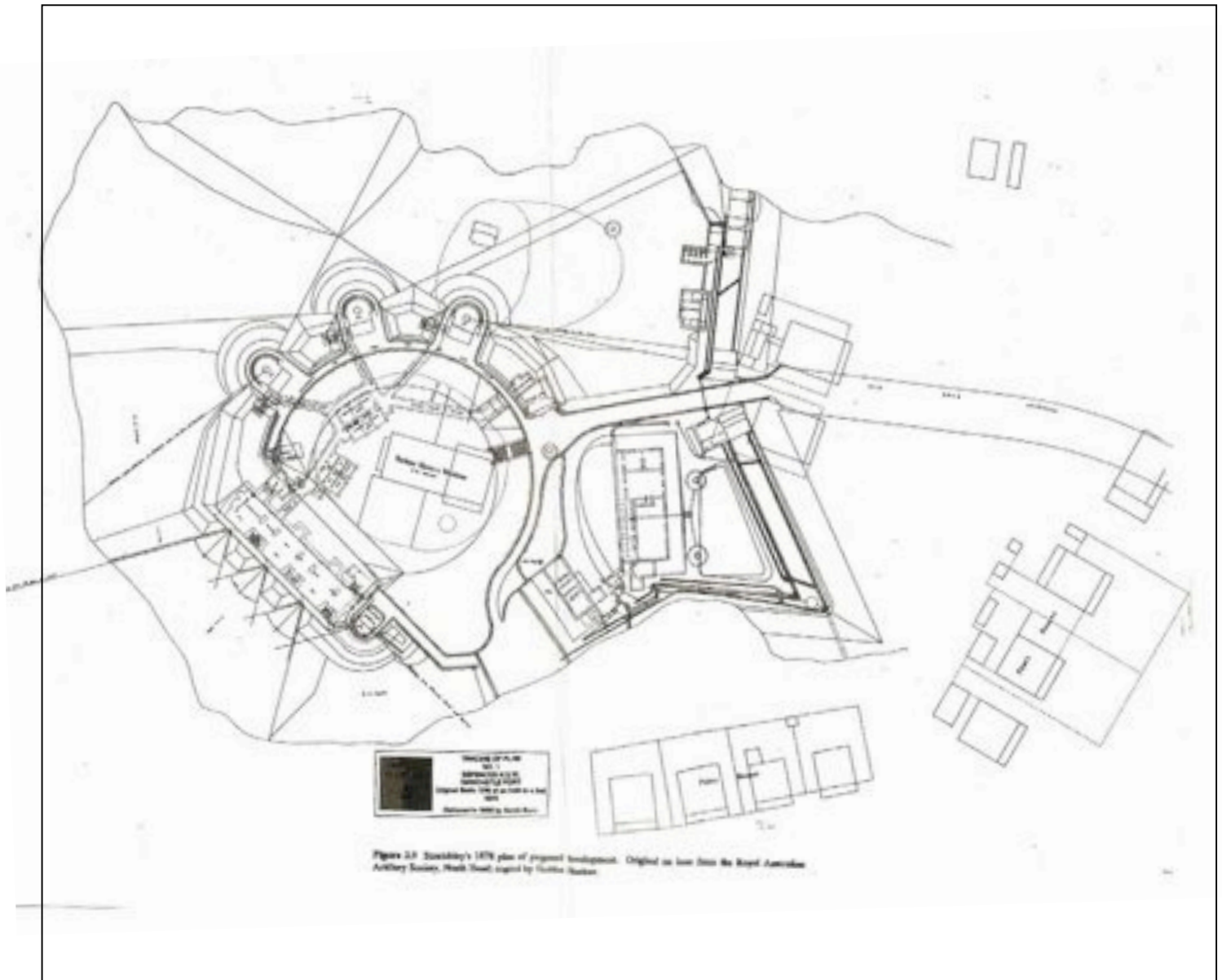
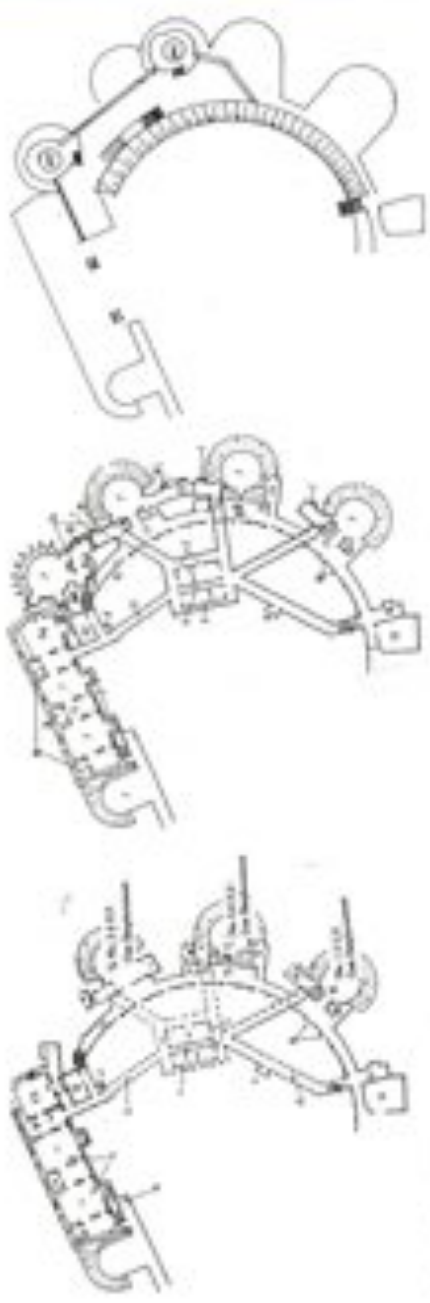


Figure 6.25 Scratchley's 1878 plan of the proposed fort at Newcastle, located on the site of the Harbour Masters Residence, with the existing Pilot's Houses to the south and east. (Courtesy of GML P/L. from Godden Mackay Pty Ltd, 1992 *Fort Scratchley Newcastle, Conservation Plan* reprinted 1996, prepared for the Commonwealth of Australia.)



Battery Complex 1892 – 1911

The 9" breech loading guns in the barbette were replaced by four disappearing guns, 1x8" & 3x6" BL disappearing guns.
 A new gun pit was constructed east of the casemate battery - this involved the removal of the Harbour Pilots lookout & signal mast.
 The pits were converted to a circular shape and deepened to 9'8", a casemated section added to the rear of each gun and new shell recesses added.
 The No.3 shell hoist was altered by the addition of a cylindrical shaft.
 The three 80 pounder RML guns in the casemate were replaced by three 1.5" Nordenfiet QF guns.
 The Submarine Mine Command and Observation Post came on line.
 The west passage was built and the open passage covered.

Battery Complex 1911-1936

The disappearing guns were replaced by two 6" Mark VII BL guns.
 The emplacement (No.4) of the 8" disappearing gun was filled in and partially covered by the new 6" emplacement.
 A new permanent reinforced concrete cover was added and the central area was converted to a shell store.
 The southern 6" emplacement was constructed between the No.2 and No.3 disappearing gun pits.
 The shell lifts were modified and new shell and armory stores were built.
 A new access was provided by stairs between the guns

Aerial View and Section 1986

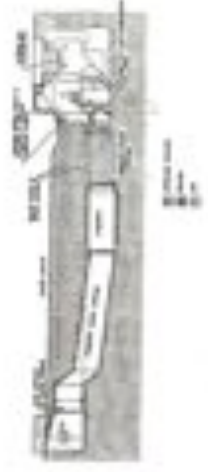


Figure 6.26 Aerial views, diagrammatically representing the changes to Fort Scratchley, undertaken to keep up with changes in defence technology and changing threats over time. (Diagrams prepared by Godden Mackay P/L 1992.) Note: The level changes to Fort Scratchley are typically of those occurring at most of the coastal forts over time.

6.10.16 Conclusions

The late nineteenth century Australasian fortress system is a component, albeit a colonially requested and funded afterthought, of the largest Imperial defence project undertaken by the British Government to that time, which saw from 1856 to the 1890s, their principal naval arsenals, dockyards and coastal settlements at home and abroad, fortified as part of an extensive and comprehensive scheme to meet the altered conditions of modern warfare in the age of steam ships.

The commonality of the design approach in Australia reflected the standard approach to naval defence adopted by the British Empire in the face of the new challenges presented by steam driven shipping. The fortress system was a departure from the previous isolated site planning approach and an important precursor to Federation and the introduction of a single defence force in Australia. The defence work of Jervois and Scratchley, with modifications and upgrading, was the basis for Australian territorial defence for over thirty years until after World War 1.

Typically located on dramatic coastal sites associated with major settlements and strategic coal deposits, the locations of fortresses in Australia demonstrate the accepted late nineteenth century view that the main threat to the remote and isolated colonial settlements was a surprise raid by a small naval contingent and the front line of defence was the Imperial Navy. The perceived level of threat and its immediacy was heightened by the introduction of a telegraph line to Australia, through Darwin in 1872 and into Sydney at La Perouse in 1876.

The late nineteenth century fortresses, as a group, have an unprecedented ability to demonstrate the impact of the period of rapid technological change associated with the age of steam, on Imperial defence strategy and on the details and size of fortification works.

The forts are characterised by:-

- locations on strategic coastal sites, particularly associated with major settlements and re-coaling opportunities;
- rifled ordnance of greatly increased range, which enabled the defence of greater areas;
- increased artillery power in response to the armour plating of ships;
- an association with novel modes of construction, with experimental design and with new artillery;
- a corresponding increase in the 'power of the resistance of fortifications' including the widespread adoption of new mass concrete construction techniques, the introduction of massive iron walls and shields and of more massive and extensive earthworks;

-
- armaments of greatly increased size which necessitated the introduction of mechanical appliances and mechanical assistance, and
 - alterations in the details of the old system of fortifications including an association with submarine minefields, contact and mechanical mines and in some with cases with light booms.

The armaments of the forts, which continued to use rifled muzzle loading (RML) guns long after breech loading ordnance had been introduced elsewhere, demonstrates both Scratchley's advocacy of the guns and an aspect of the commercial and exploitative relationship between the colonies and the British government who were happy to sell obsolescent models being phased out in British service, to its colonies.

The fortress group in Australia comprising substantially new fort constructions instigated and designed by Jervois and/or Scratchley include in NSW, Fort Scratchley and Bare Island and modifications to South Head, Georges Head and Middle Head Forts; in Victoria, Swan Island, Popes Eye, South Channel, Fort Nepean, Point Franklin and modifications to Fort Queenscliff; in Queensland Fort Lytton and Green Hill Fort (Thursday Island); in South Australia, Fort Glanville and Fort Largs; in Western Australia, the Princess Royal Fortress and Fort Plantagenet in Albany, and in Tasmania, Kangaroo Bluff Fort. Some of the above particularly in Victoria may be batteries rather than fortresses and in addition to the fortresses there were also various batteries recommended by Jervois and Scratchley.

Note: Additional State and Territory research, beyond the scope of this project is required to ensure that the above list of fortresses is accurate and comprehensive. Such research is required to complete a proper assessment and a statement of significance for the late nineteenth century fortress group associated with Jervois and Scratchley and with the impact of steam age technology on fortress design.

7.0 Significance Assessment

7.1 Significance Assessment Approach

Assessment of cultural significance can be undertaken in a number of ways. The Burra Charter of Australia ICOMOS divides significance into aesthetic, historic, scientific and social categories. JS Kerr's *The Conservation Plan* (National Trust of Australia (NSW) 3rd Edition 1990) considers the concept of cultural significance according to three qualities: the ability of the place to demonstrate a process, custom or style; associational (historical) links for which there may or may not be surviving evidence; and formal or aesthetic qualities.

The Commonwealth Government's Department of Environment and Heritage introduced a new national heritage system on January 1st 2004; it includes a new National Heritage List, a new Commonwealth Heritage List, the creation of the Australian Heritage Council and continued management of the Register of the National Estate. Under the new heritage system the National Heritage List and the Commonwealth Heritage List have similar criteria to those used in the State of New South Wales with the addition of an indigenous values criteria. The key difference is the level or threshold by which they meet one or more criteria. The National Heritage List records places with outstanding heritage value to the nation. The Commonwealth Heritage list criteria are used to assess places owned by the Commonwealth Government.

The assessment criteria used by the Heritage Office of NSW have recently been reviewed and updated. The NSW HM criteria now comprise four 'nature of' and 'associational' criteria and two 'degree' criteria, which are used to consider the significance of the La Perouse Headland.

No assessment against the National Heritage List criteria has been carried out as part of this study. However, it is possible that some of the specific values of the place are of national heritage significance.

7.2 Application of Significance Assessment Criteria

7.2.1 A: Cultural or Natural History

Criterion (a) - an item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area);

State Historical Significance Values

The La Perouse Headland has historic significance at a national level for its role in the nationally recognised theme, of early voyages of discovery and scientific exploration.

The Bare island Fortress has historic significance at a national level as one of a group of late nineteenth century fortresses located across Australia, arising from colonial governments reaching a certain level of maturity, from advances in defence technology associated with coal fired steam shipping and changes in British policy towards its colonies.

The whole La Perouse headland is historically significant for its long and continuing association with Aboriginal people pre-dating Cook's arrival and continuing over many generations to the present day. This longevity and continuity of association with the headland and its wider landscape by the Aboriginal community is an unusual ongoing historical association in metropolitan Sydney.

Some of Australia's earliest scientific physical experiments were carried out at the La Perouse Headland by Joseph Lepaute Dagelet.⁸⁹

La Perouse is highly significant in the history of the Roman Catholic Church in Australia, being the first place where a Mass was held in this country.

The La Perouse Headland is a much-loved landmark symbolic of the locality and is a focal point of daily life for the close-knit community, both in the past and the present

Many Aboriginal families displaced from their own lands in and around the Sydney basin moved to the headland area where the size and permanence of the Aboriginal encampment immediately adjacent to the headland was a factor in the creation of the government's Protectorship of Aborigines and the subsequent evolution of public policy toward Aborigines.⁹⁰

The historically remote, yet strategic location of La Perouse as the 'back door' to Sydney and to Sydney's water supply, led to early recognition of the strategic value of the place, which resulted in an ongoing customs or military occupation for most of the nineteenth and early twentieth century.

⁸⁹ Morrison and Barko, who had access to original Bougainville and other writing not previously published (certainly in English - but in French also).

⁹⁰ See Tuck, 2007 Draft History: Section headed La Perouse Aboriginal Camp: 108

The brief occupation of the headland by the French expedition led by La Pérouse in 1788, for necessary boat repair and crew recuperation, while the First Fleet was still in Botany Bay, focussed government attention on the potential of the place as a site for foreign incursions.

The Macquarie Watchtower is an important symbol of the vexatious issue of customs barriers between the colonies, which was one of the main factors underlying the push for Federation.⁹¹

The Macquarie Watchtower is associated with the development of a Customs Service in Australia.

The Sydney/New Zealand sub-marine cable was the final link connecting the main British colonies.

The improved speed of communication provided by the Sydney/New Zealand sub-marine telegraph cable had an immediate impact on the media and the public, and fostered closer relations between Australia and New Zealand.

The Cable Station building complex is associated with the later stages of great engineering enterprises, when submarine cables were transforming communications across the globe and giving rise to unprecedented levels of internationalism.

The use of the Bare Island Fortress as a war veterans' home is associated with the beginning of political and practical acceptance of a social and moral obligation to the veterans of wars fought across the British empire and subsequently to veterans of other theatres of war.

Joseph Banks, in his role as a scientific observer, visited Bare Island on 30th April 1770 to collect shell specimens, during Captain Cook's initial exploration of Botany Bay. Captain Cook inadvertently named the island, when he referred to it in his journal as a 'small bare island' and it was cited a number of times by both Banks and Cook in their personal journals.

The Bare Island Fortress was an important component of the late nineteenth century colonial defence strategy for New South Wales and Australia.

The Bare Island Fortress is associated with the increased interest in defence from colonial governments, which reflected the impact of the British Cardwell Reforms to the British Army, where British troops were withdrawn from the wealthier colonies, including those in Australia in 1870.

⁹¹ David Day In *Smugglers and Sailors, the Customs History of Australia 1788-1901*, quoted in the Contextual Analysis section of this report: See Section 6.2.

Local Historical Significance Values

Tourism and recreation have been associated with the La Perouse headland since the establishment of the French monuments from around the late 1820s. The levels of visitation grew as transport options improved and Aboriginal tourism enterprises became a feature of the headland.

7.2.2 B: Association with Person/s or Area

Criterion (b)- an item has a 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 cultural or natural history of the local area);

State Significance Value for Association with a Person or Area

The La Perouse area within Botany Bay is one of the earliest places of well-documented contact in Australia between Aborigines and European explorers and settlers.

The continued occupation of the La Perouse area by direct descendants of Aboriginal families within and around the headland site is a rare ongoing association with place in the Sydney region. (See Section 10.0, Action 10, which recommends a Living History Project, including oral histories, which will elaborate on this continuity of occupation.)

Bare Island is associated with James Cook's first visit to Botany Bay and with Joseph Banks who led a small party onto the island to collect shells.

Bare Island Fortress and Barracks has a strong association with the demise of the Colonial Architect, James Barnet's otherwise distinguished career.

Bare Island Fortress is one of the group of new and redesigned late nineteenth century, coastal defensive fortresses in Australia associated with the specifications of Major-General Jervois and the designs by Lieutenant Colonel Scratchley of the Royal Engineers.

The Bare Island Fortress has a strong association with War Veterans being the earliest location of formalised Veteran's accommodation in Australia.

The rock engravings on the La Perouse Headland were some of the first recorded in NSW by two eminent scientists, who showed an early scientific interest in the Aboriginal cultural and aesthetic life, namely W.D. Campbell and R.H. Matthews.

The headland is associated with the last landfall of the Lapérouse expedition. It is the site of the grave of Père Receveur, a Franciscan monk and naturalist on the expedition associated with the celebration of the first Catholic mass in Australia, prior to his death.

The subsequent loss of the expedition in the Pacific drew the attention of French mariners to the place and it became a site of pilgrimage to monuments erected in the memory of the expedition.

The funding of the French monument proposed by de Bougainville during his 1825 expedition to the South Pacific was an intensely personal expression of the regard for the Lapérouse Expedition held by the officers of the French expedition ships, who collected money among themselves to raise the monument.

The La Perouse monument and Père Receveur's grave (Laperouse Monuments) have come to be recognised as symbols of French/Australian goodwill that continues to be celebrated at the headland with annual events as well as a tradition of visits from French sea captains bearing the gift of their ship's plaques.

The Cable Station building is associated with the Colonial Architect's Office under the colonial architect James Barnett,

Local Significance Value for Association with a Person or Area

The origin of the carving of a prone convict on the rocks on the south west corner of the headland, which is now very weathered, is not known. The figure is likely to have been the product of an early long-term resident of the area.

The place also has a long history of interaction between local Aboriginal people and tourists. The headland was the focus of tourism related craft making including boomerang and shield manufacture for sale and demonstration by the men and the making of shell baskets⁹² and other ornaments by the local women for sale to tourists as well as other activities to bring in an income.

The "Snake Man" is a well-known and well-regarded local figure. His weekend shows are well attended. His show is a longstanding feature that contributes to the local character of the place.

La Perouse is also a place associated with the industriousness of the Aboriginal people who engaged in commercial fishing. Fishing mullet and salmon on a run off the all-weather Frenchman's Beach, using long boats and manually hauled nets and using spotters from adjacent headlands. This was a continuation of traditional fishing practices modified by the adoption of new technology.⁹³

⁹² See *La Perouse the Place, the People and the Sea*. Aboriginal Studies Press. Canberra 1988 10, 12-13 and description by Beryl Bellar p80

⁹³ Ibid See description by Ronnie Ardler p75 and 77, Clara Mason p79 and illustrations by Shane Williams p74 and 76. See also Dallas 2000 *Hill 60, Port Kembla Conservation Management Plan*: p65, 66 and 74, also Figures 6.1.1 and 6.1.2 illustrating present day lookout spotting and netting techniques which are a continuation of the past fishing practices on all-weather beaches in south eastern NSW.

7.2.3 C: Aesthetic/ Creative

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);

State Aesthetic/Creative Significance Value

The La Perouse Headland is a highly visible local landmark with a distinctive aesthetic quality arising from the windblown coastal landscape, dotted with widely spaced historic building groups and landmarks.

The La Perouse Headland is valued as a distinctive component of the coastal landscape and receives a steady stream of visitors who come to enjoy the dramatic coastal landscape as viewed from the headland, appreciate the historical associations and intriguing buildings and participate in various attractions which have continued for many years. It provides unparalleled dramatic views of the broader coastal landscape, inland views to the urban areas of South Sydney and to the distant Blue Mountains and of unfolding weather systems.

The continuity of tourism based on Aboriginal culture and crafts is unique to the area.

The Bare Island Fortress demonstrates the new conditions of warfare specific to the second half of the nineteenth century in the new age of steam, which allowed for rifled ordnance of greatly increased power, range, size and accuracy. The fortress was also designed using comparatively new mass concrete construction techniques and included the insertion of massive iron walls and shields and mechanically assisted appliances.

Bare Island's distinctive 'bare' aesthetic, noted by Captain Cook, modified by the addition of the fortress continues to present a pleasing artificial, 'bare' aesthetic of low-rise, mass concrete intertwined with the natural topography. The extraordinary Bare Island aesthetic is highly valued for its panoramic views, scenic vistas and for the cinematic opportunities associated with the exterior and interior spaces of the fortress.

Bare Island is a lovely coastal island set in a beautiful marine environment that is unusually accessible and visible because of the viewing opportunities from the bridge to the island and the rock platform around the island shores.

The Macquarie Watchtower has long been recognised as a picturesque landmark on the headland, which is much photographed.

By comparison with the set of international Cable Station buildings, which includes many buildings of domestic scale and architectural style, the La Perouse complex is one of the more substantial and impressive Cable Station buildings.

Joseph Lepaute Dagelet performed scientific physical experiments at the temporary observatory at La Perouse, which locates some of Australia's first scientific physical experiments at the La Perouse headland.

Local Aesthetic/Creative Significance Value

The engraved art sites on the headland and in the greater region have an unknown function and meaning. However more recent, historical Aboriginal stories include reference to many of the marine animals, which have been depicted in the prehistoric past.

The shell craft work created by the local Aboriginal women and the burning of designs on the boomerangs and shields for sale to tourists are unique to the area and demonstrated the evolution of a post contact commercial aesthetic based on traditional activities.

The continuation of long net fishing in post contact times by Aboriginal people who applied timber long boat technology to their traditional fishing techniques, in an enduring shared community practice.

The three dimensional carving of a prone convict on the rocks on the south west corner of the headland which is now very weathered, is a rare rock carving style in the Sydney region. Its presence, which is of local significance, adds an additional layer of interest to the precinct.

The Bare Island Fortress is associated with two well known late twentieth century films.

Bare Island presents a pleasing artificial aesthetic of low-rise, intertwined mass concrete and natural topography, characteristic of the coastal forts of the period.

The Cable Station building is a rare architectural design of the period where the arrangement of internal spaces and the building envelope expresses the various occupations and commercial relationships, considerably in advance of the International School, 'Form follows Function' model of the early twentieth century. The Cable Station building is a significant feature in the headland landscape with a strong sense of place.

7.2.4 D: Community Regard

Criterion (d) - an item has strong or special significance with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons;

State Social/Cultural/Spiritual Significance Values

The La Perouse Headland has potential national significance identified at the Social Values workshops as part of a larger landscape of Aboriginal community survival and protest. The larger landscape includes Kurnell and Botany Bay, as sites of Aboriginal protest and survival from 1988 through to at least the 1990s. This approach acknowledges Aboriginal tradition and continuity at Kurnell and La Perouse and is a symbolic protest against invasion by Europeans.

This aspect of potential national significance needs more discussion with Aboriginal people at both a national and local level.

Aboriginal initiated cultural tourism on the headland is the earliest such enterprise in Sydney. For many families the making and selling of artefacts at ‘the loop’ and demonstrations of boomerang throwing provided additional income and in part demonstrates the continuing connection to the place.

The place is valued by people who have visited over many decades and who continue to come to see and interact with Aboriginal culture, to enjoy the dramatic coastal landscape as viewed from the headland, to appreciate the historical associations and intriguing buildings and to participate in the various attractions, which have continued for many years.

The Aboriginal sites, especially the engravings on rock shelves around the headland are important for cultural and spiritual reasons as links to past Aboriginal people and tangible evidence of cultural longevity. These sites are also regarded by the present community as socially and culturally important as sites for elders to teach Aboriginal children about traditional culture. They are also important as places to interpret Aboriginal culture to visitors in a way that will engender respect and understanding. The community have expressed strong concerns that the engravings are fading and eroding and may be lost in the future.

The La Perouse Headland is significant for social and cultural reasons to the La Perouse Aboriginal community as part of a wider cultural landscape and seascape where Aboriginal people travelled in a round of daily activities of fishing and food gathering on beaches and headlands, cooking and eating food from the sea and making artefacts for use and sale to tourists (especially shell art by the women and boomerangs by the men). These activities occurred at favourite locations visited by family groups over several generations and continue today.

The La Perouse Headland has a strong and special association with the French-Australian community of New South Wales: -

- The La Perouse Headland is significant for the strong and special social attachment of the French-Australian community developed from its association with the lost Lapérouse expedition and subsequent French expeditions in search of La Pérouse, his ships and sailors.
- As a special place used over several generations for important cultural celebrations such as Bastille Day, and as a focus for the French-Australian community and the friendship and connections to France.
- Specifically, a triangle of French sites consisting of the La Pérouse exhibition in the museum, the La Perouse Monument commemorating the lost expedition and Père

Receveur's tomb are held in particular affection for their association and symbolic meaning to the past and present French community.

Local Social/Cultural/Spiritual Significance Values

The place is valued by the present local community living in the vicinity and interacting with it every day as:-

- a much-loved landmark which symbolises the locality and is a focal point of daily life for the close-knit community, both in the past and the present
- a dramatic open landscape and natural setting as experienced in changing weather and light, the historic buildings which give a sense of intrigue, the views of the sea, coastline and southern headlands, and the contrasting view of the industrial landscape of Port Botany
- a site of community activism for the protection of the place at times of threat over many years
- a close-knit village community atmosphere, strengthened by the feeling of being at the 'end of things', in spite of for much of its early history being considered neglected by government
- the layers of history and associations with key historical figures and events
- a place where these values have been shared for many years with visitors and tourists.

The place is valued by recreational users especially divers and fishing groups from the local and regional area as:-

- a strongly valued safe and high quality dive site, especially the waters around Bare Island, where unique marine life can be experienced
- a popular recreational fishing site used since the late 1820s, and used by a wide range of ethnic groups.

The place is potentially significant locally to the following groups for the following social, cultural or spiritual reasons:-

- The Cable Station/museum is of potential social and cultural significance to former Salvation Army workers, women and children who occupied the building when it was a women's refuge from 1944 to 1988
- Bare Island is of potential social and cultural significance to the former war veterans who were housed there from 1912 to 1963 (with some Veterans even remaining there throughout WWII).

-
- The La Perouse Headland is of potential cultural and spiritual significance in the history of the Catholic Church in Australia as the place where the first mass was celebrated by Père Receveur and for commemoration of this event by the current Catholic community.

7.2.5 E: Technical and Research Significance

Criterion (e) - an item has potential to yield information that will contribute to an understanding of NSW's cultural and natural history (or the cultural and natural history of the local area);

State Technical and Research Significance Value

The Bare Island Fort has potential to be of national technical and research significance value as the most complete surviving late nineteenth century fort in Australia, which demonstrates all the new technologies associated with coastal defence in the age of steam. (The other forts were substantially modified during World War II and/or from subsequent re-use.)

This aspect of potential national technological significance needs more research to verify the comparative level of intactness of the surviving late nineteenth century forts in other states.

The La Perouse headland has potential to retain archaeological evidence of the occupation by the Lapérouse Expedition including the construction of a stockade and a garden, known as the 'French Garden', which has potential to be of national and international significance value.

The Bare Island Fort is the most complete late nineteenth century coastal defence fort in New South Wales.

The headland has potential to retain archaeological evidence of the early occupation of the Macquarie Watchtower, which is not documented elsewhere.

Local Technical and Research Significance Value

The archaeological research potential and educational value of the Aboriginal occupation sites is high.

Aboriginal sites within the area demonstrate the evolving pattern of Aboriginal cultural history and use of local resources. The suite of archaeological Aboriginal sites on the La Perouse Headland is representative of a local occupation pattern. There are common themes in one class of site - the rock engravings and the relationship of the rock carvings and the broader group of sites to others in the region warrants further research.

The Aboriginal archaeological heritage sites on the La Perouse Headland have potential to yield information that will contribute to an understanding of NSW's Aboriginal cultural history, occupation patterns, stone tool technology, ceremonial life and art history. The sites have the

potential to elucidate patterns of adaptation in a coastal and sheltered embayment setting with a strong marine focus.

The Aboriginal archaeological sites represent the particular adaptation the local Aboriginal people created to take advantage of the marine environment with a focus of occupation around the shores of Botany Bay and the rocky headlands of the coast.

The headland has potential to retain archaeological evidence of the early occupation of the boatmen's cottages and subsequent cable station and military occupations.

The landfall of the Sydney/New Zealand sub-marine cable route is now only represented by archaeological evidence of local significance value.

The Cable Station building complex is associated with the later stages of the time of great engineering enterprise when submarine telegraph cables were encircling the globe, however no telegraph equipment or cabling survives on the site.

7.2.6 F: Rarity

Criterion (f) - an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area);

State Significance Value for Rarity

Bare Island is one of a strategic network of coastal fortifications significant on a State and national level.

Bare Island, which is part of a network of significant coastal fortifications around Sydney, is a rare example of a late nineteenth century coastal defence fort that is comparatively intact.

The Bare Island Fort is the first War Veteran's Home in Australia.

The La Perouse Site is a good representative example of an emotional attachment with place, which is associated with historical events and with the dramatic landscape, rather than with man made structures.

The Loop was the site of the first sustained Aboriginal initiated cultural tourism in Sydney. The commerce of the local Aboriginal people, which developed around the local tourism, is rare for its early success and its continuity over time.

Aboriginal fishing for mullet and salmon on a run, off the all-weather Frenchman's Beach, using long boats and manually hauled nets and using spotters from adjacent headlands was a continuation of traditional fishing practices that occurred at only a few other all-weather beaches

on the south coast. Such beaches where Aboriginal families have been able to continue traditional fishing practices are extremely rare along the NSW coast⁹⁴.

The La Perouse Headland is the last landfall of the Lapérouse Expedition. The subsequent disappearance of the expedition was an event of international importance at the time.

Joseph Lepaute Dagelet performed scientific physical experiments at the temporary observatory at La Perouse, which locates some of Australia's earliest scientific physical experiments at the La Perouse Headland.⁹⁵

It is a rare place where an emotional link was forged between the French and British colonists who both mourned the loss of the Lapérouse expedition.

It is a rare place of pilgrimage in Australia for French nationals, the local French community and for visiting French mariners.

The Macquarie Watchtower is the oldest surviving watchtower in Australia, the oldest building in Botany Bay and the only known tower specifically constructed for border protection and the prevention of smuggling.

The Macquarie Watchtower became the first Customs outstation in Australia in 1829 under the newly formed Customs Department and operated as a Customs Station until 1903.

The Macquarie Watchtower is a rare architectural form in Australia that was superseded by advances in technology soon after the country was settled.

The Macquarie Watchtower is also a rare surviving symbol of the vexatious issue of customs barriers between the colonies, which was one of the main factors underlying the push for Federation.

The Cable Station Building is one of only two substantially intact, surviving cable station buildings in Australia (the other being at Cottesloe) and was one of only a small set, ever built in Australia.

Local Significance Value for Rarity

The post contact history and development of the La Perouse Aboriginal community made up of re-located people is an example of a series of families successfully maintaining strong and continuous associations with a place and at the same time retaining their separate cultural identity.⁹⁶

⁹⁴ See Dallas 2000 Hill 60, Port Kembla Conservation Management Plan: p65, 66 and 74, also Figures 6.1.1 and 6.1.2 illustrating present day lookout spotting and netting techniques which are a continuation of the past fishing practices on all-weather beaches in south eastern NSW.

⁹⁵ Morrison and Barko had access to original Bougainville and other writing not previously published (in English and in French).

⁹⁶ See D Tuck, 2007 Draft History: Section headed 'Lapa': 210

The La Perouse Headland rock engraving containing the Whale and calf are considered rare motifs in the region, although there is a small number of other whale depictions along the Sydney coastline.

The three-dimensional nature of the European rock cut carving of a prone convict is rare.

7.2.7 G: Representativeness

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 a class of local areas

- **cultural or natural places; or**
- **cultural or natural environments.)**

State Representativeness Significance Value

The Bare Island Fort has potential to be of national significance value as the best surviving representative example of the group of late nineteenth century forts in Australia. It has the ability to demonstrate all the new technologies associated with coastal defence in the age of steam.

The Macquarie Watchtower is a rare surviving, representative example of the use of the tower form during the Macquarie era.

Local Representativeness Significance Value

The Sydney/New Zealand Submarine Cable laid in 1876, twenty-five years after the laying of the first successful submarine cable, used technology that was well understood and representative of the technology of the time.

The Aboriginal archaeological sites are an integral part of the heritage value of the place, providing a demonstration of Aboriginal landscape and seascape management which continues to the present day.

Conclusions

Based on the above response to the State Heritage Office criteria, consideration needs to be given to the National Heritage List criteria to determine whether the place meets the thresholds for National listing or whether it simply meets some criteria without meeting the 'significance threshold test.

7.3 National Heritage Significance⁹⁷

The National Heritage List is a list of places with outstanding natural, Indigenous or historic heritage value to the nation. When heritage experts assess if a National Heritage List nominated place is considered to have heritage value they will check to see if the place meets one or more of nine National Heritage List criteria. The La Perouse headland arguably meets criteria (a), (g), and (h) in terms of being 'outstanding'. (See National Heritage List criteria below).

7.3.1 Criteria for the National Heritage List

(a) the place has outstanding heritage value to the nation because of the place's importance in the course, or pattern, of Australia's natural or cultural history.

A place connected to the early voyages of discovery and scientific expeditions.

Potentially as part of a larger landscape of Aboriginal community survival and protest.

Bare Island Fortress is one of a group of late nineteenth century coastal fortresses associated with a level of colonial maturity, changes in defence technology and changes in British policy.

(b) the place has outstanding heritage value to the nation because of the place's possession of uncommon, rare or endangered aspects of Australia's natural or cultural history.

Bare Island Fort may be the most intact example within the group of late nineteenth century fortresses in Australia.

(c) the place has outstanding heritage value to the nation because of the place's potential to yield information that will contribute to an understanding of Australia's natural or cultural history.

Potential to retain archaeological evidence associated with the last landfall of the Lapérouse expedition.

(d) the place has outstanding heritage value to the nation because of the place's importance in demonstrating the principal characteristics of:

(i) a class of Australia's natural or cultural places; or

(ii) a class of Australia's natural or cultural environments;

Thought to be the most intact and best representative example of the group of late nineteenth century coastal fortresses and their technology in Australia and possibly in Australasia.

⁹⁷ The following discussion of the national heritage significance value of the La Perouse Headland is based on information about applying the criteria in <http://www.environment.gov.au/heritage/national/criteria.html>

(e) the place has outstanding heritage value to the nation because of the place's importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.

Not applicable

(f) the place has outstanding heritage value to the nation because of the place's importance in demonstrating a high degree of creative or technical achievement at a particular period.

Bare Island fort is thought to have an unparalleled ability to demonstrate the main technological advances in fixed defence, coastal fortress design in the age of steam.

(g) the place has outstanding heritage value to the nation because of the place's strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;

Potential national significance identified as part of a larger landscape of Aboriginal community survival and symbolic protest against invasion by Europeans. This aspect of potential national significance needs more discussion with Aboriginal people at both a national and local level.

(h) the place has outstanding heritage value to the nation because of the place's special association with the life or works of a person, or group of persons, of importance in Australia's natural or cultural history;

The special association with the Lapérouse expedition.

(i) the place has outstanding heritage value to the nation because of the place's importance as part of Indigenous tradition.

Not applicable

7.3.1 Significance Threshold

While a place can be assessed against criteria for its heritage value, this may not always be sufficient to determine whether it is worthy of inclusion on a particular heritage list. The Australian Heritage Council uses a second test, by applying a '**significance threshold**', which judges the level of significance of a place's heritage value by asking '**just how important are these values?**'

To reach the threshold for the National Heritage List, **a place must have 'outstanding' heritage value. This means that it must be important to the nation, that is, to the Australian community as a whole.**

Whether a place has 'outstanding' heritage values, is normally considered by comparing the nominated place to other, similar types of places. The La Perouse headland is unique because of its association with the Lapérouse expedition and the ongoing, site-specific relationship with the French community in Australia. The La Perouse headland was the last known landfall of the Lapérouse expedition and became an important symbol, particularly for French mariners. It is a

place where regard for La Pérouse and of the courage exhibited in the late eighteenth century race between Britain and France to chart and explore new worlds is remembered and celebrated. The symbolism of the place was reinforced with the construction of a permanent monument to the expedition, instigated in 1825 by de Bougainville, himself a famous explorer. A tradition of pilgrimage to the headland by French mariners, including modern merchant marine captains and annual events has kept the historic associations and symbolism alive.

The Social Values Assessment (SVA) found 'that while the La Perouse Headland is connected to a nationally recognised story or theme, that of early voyages of discovery and scientific exploration, it is of historic rather than social significance at a national level.

On the other hand the Bare Island Fortress is one of around fourteen late nineteenth century fortresses in Australia. It is the most intact and best example of the genre in New South Wales and is thought to be the most intact surviving fortress of the group with unparalleled ability to demonstrate the fixed coastal defence technology of the period. However, the interstate fortresses are not well documented and more research and/or site visits are required to verify the above assertions.

The social significance workshops identified the place as having 'potential national significance as the site of Aboriginal community survival and protest'. However, the Social values Assessment concludes that:-

This aspect of potential national significance needs more discussion with Aboriginal people at both a local and national level.

Conclusions

On the basis of the above discussion the La Perouse Headland appears to meet both the Australian National Heritage List criteria and its threshold only for its historic associations and archaeological potential associated with being the last landfall of the Lapérouse expedition. However, there is high potential for the National criteria and threshold to be met for the Bare Island Fortress which is thought to be the most intact representative example of an Australia wide, group of late nineteenth century coastal defence forts that would meet national significance criteria and thresholds, as a group. There is some potential for the criteria and threshold to be met as a site of Aboriginal community survival and protest.

7.4 Summary Statement of Significance

The La Perouse headland precinct is a place of national and state significance. Its historically remote, yet strategic location, as the 'back door' to Sydney and its natural beauty has resulted in the present complex layering of heritage values.

The whole La Perouse headland is culturally and socially significant to the contemporary La Perouse Aboriginal community for its long and continuing association with Aboriginal people pre-dating Cook's arrival and continuing over many generations to the present day. This longevity and continuity of association with the headland and its wider landscape is strongly shared across the community. The association between Aboriginal people and the La Perouse headland is of State significance. It is potentially of national significance as the site of Aboriginal community survival and protest. However more consultation and research is required to verify the level of significance.

The national significance of the place arises from being the last landfall of the 1785 to 1788, Lapérouse expedition led by Jean-Francois de Galaup, Comte de La Pérouse, who was a highly regarded French naval commander. The Lapérouse expedition, which succeeded Captain Cook's voyage of exploration, was one of the earliest and most comprehensive Pacific voyages of discovery and scientific exploration. Published records of the voyage remain important sources of cartographic and scientific information, witnessing the founding of the British colony in Australia and contributing to the knowledge of the Enlightenment scientists. Joseph Lepaute Dagelet carried out some of Australia's earliest physical scientific experiments at the temporary observatory at La Perouse. The expedition was associated with European expansion into the Pacific and competition between the French and British governments. Specifically, a triangle of French sites consisting of the La Pérouse exhibition in the museum, the La Perouse Monument commemorating the lost expedition, and Père Receveur's grave are held in particular affection for their association and symbolic meaning to the past and present French community and as contemporary places of cultural celebration.

Bare Island Fortress, constructed between 1881 and 1890 is thought to be one of the best surviving representative examples of a nationally significant group of late nineteenth century defence forts, strategically located around the coastline of Australia. The fortresses were all recommended and designed by the British military defence experts, Sir William Drummond Jervis and Sir Peter Scratchley at the request of the colonial governments. The Australasian fortress system was a component of the largest Imperial defence fortification project undertaken to that time. The forts were constructed to address threats of warfare from Europe in the context of the new challenges presented by naval vessels in the age of steam. Bare Island Fort, which remains substantially intact, is thought to have an unparalleled ability to demonstrate the new technologies and the alteration from the old system of fortifications. The Bare Island Fortress is particularly notable for its controversial construction history and its association with the demise

of the otherwise distinguished career of the Colonial Architect, James Barnet. Re-use of the fortress in 1912 saw it become the first War Veteran's Home in Australia which signalled the beginning of political and practical acceptance of a social and moral obligation to the veterans of wars fought across the British Empire and subsequently to veterans from other theatres of war.

The headland is one of the earliest places of contact in Australia between Aborigines and European explorers and settlers. The continued occupation of the area by dislocated Aboriginal families within and around the Aboriginal Reserve site is a rare and ongoing example of a transferral of Aboriginal attachment to place within urban Sydney. The size and permanence of the Aboriginal encampment immediately adjacent to the headland and its close proximity to Sydney, was an important factor in the formulation of public policy towards Aborigines including the creation of the reserve system and the Protectorship of Aborigines. The La Perouse headland is also a place with the ability to demonstrate high levels of industry by Aboriginal people who engaged in commercial fishing and in tourism related craft making catering to the considerable numbers of tourists drawn to the headland.

The Aboriginal archaeological heritage of the area comprises a suite of Aboriginal sites disturbed by occupation and visitor use that nonetheless has high community and research value at a regional level. The prehistoric archaeological remains at this place are significant to the Aboriginal community and the traditional Elders. They demonstrate the evolving pattern of Aboriginal cultural history and have the potential to yield information about coastal occupation strategies associated with an all weather beach, which is relatively rare in NSW and about patterns in the creation and distribution of rock engravings.

The Headland has strong historical and spiritual significance for Catholic community in Australia. It is recognised as the location of first Catholic mass in Australia and the site of the grave of the first Catholic priest buried in this country. It is a place of religious remembrance and pilgrimage.

The c.1820 Macquarie Watchtower and the 1882 La Perouse Cable Station are both items of State heritage significance value. They are associated with significant historical enterprises. They are also landmark items in the headland landscape with a strong sense of place.

The c.1820 Macquarie Watchtower, is thought to have been commissioned by either Governor Macquarie or Governor Brisbane. It is the oldest surviving watchtower in Australia and the only known tower specifically constructed for colonial border protection and the prevention of smuggling. It became the first Customs outstation in Australia in 1829 and operated as a Customs Station until 1903. It is also a rare surviving symbol of the vexatious issue of customs barriers between the colonies, which was one of the main factors underlying the push for Federation.

The design of the 1882 La Perouse Cable Station is associated with the Colonial Architect's Office under the colonial architect James Barnett. The substantial building demonstrates Victorian Regency and Victorian Mannerist architectural influences although the interior layout shows a more functionalist approach. It is a rare surviving, relatively intact cable station building in Australia, however, no in situ technology survives. It is associated with the later stages of undersea, international cable connections and the transformation of global communications. Re-used for a number of accommodation functions and most recently as a local museum the building is well known at the local and regional level.

The landfall of the Sydney/New Zealand Submarine Cable laid in 1876, is now only represented by archaeological evidence of local significance value. The undersea laying of the cable that linked Australia with New Zealand and completed the network linking all the main British colonies represents a considerable engineering feat. The improved speed of communication had an immediate impact on the media and the public, and fostered closer relations between Australia and New Zealand.

The association of the La Perouse headland with tourism and recreation since the late 1820s is primarily of local and regional significance. The tourist appeal of the headland derives from its picturesque location, landmark buildings, historic associations and the interaction with the local Aboriginal population.

The Headland is a much-loved landmark, which symbolises the locality and is a focal point of daily life for the close-knit community, both in the past and the present. The place is highly valued at a local and regional level for the recreational opportunities and views that it offers associated with the open space and the dramatic and rich coastal edges.

The Laperouse Museum Collection

Assessment of the significance values of the Laperouse Museum Collection is beyond the scope of this Conservation Management Plan. A description of the contents of the Collection is provided in Section 8.14.

8.0 Constraints and Opportunities

Preamble

This study addresses the La Perouse Headland site as illustrated in Figure 1.2, which is essentially an artificial administrative boundary. Several issues discussed in the following section extend beyond the artificial boundaries of the site and some issues apply to peripheral ground at the edges of the site.

8.1 Identified Cultural Values

The main cultural values for the La Perouse Headland, which should be retained and if possible enhanced by ongoing management and new uses, are:

- The historical association with the Lapérouse Expedition and ongoing French regard for the site. (In 2006 there were 19,180 French people living in Australia born in France of whom 7,000 live in New South Wales. If the immediate descendants and French people from their colonies are included then the community in Australia is thought to be close to 50,000 with around 17,000 resident in Sydney and around 70,000 French and 30,000 New Caledonian tourists.)⁹⁸
- The unparalleled ability of the Bare Island Fortress to demonstrate the characteristic features of the group of late nineteenth century fortresses recommended & designed by Jervois & Scratchley,
- Landmark buildings (Macquarie Watchtower & the Cable Station) associated with historic figures, institutions and technologies,
- The ongoing association between Aboriginal people and the La Perouse Headland, including traditional associations,
- The open nature of the scenic environment and access to the sea,
- The ongoing association with tourism and recreation,
- The Aboriginal and historical archaeological resource,
- The associated communities and their ongoing involvement with the Headland.

⁹⁸ The 2006 figures are from the official Australian Census. Other figures are provided by the French Consulate General.

8.2 Physical Condition – General

8.2.1 Landscape

The La Perouse Headland is a developed landscape having been the subject of development and use over many decades. Elements of the original bushland remain, with the largest remnants in fair to good condition. Elsewhere the natural bushland has been replaced by grassland. These developed areas retain some natural landscape features including rock outcrops and some native plants, including grasses, which form part of the open landscape setting.

8.2.2 Buildings/Structures

The main physical associated issues with buildings at the La Perouse Headland are:

1. Macquarie Watchtower

A lack of integrity after the destruction caused by the 1957 fire and subsequent fabric failure associated with harsh conditions and rising salts and with the unsympathetic 1960s reconstruction work.

2. The Cable Station (Laperouse Museum)

Drainage management within the courtyard and surrounding grounds needs review. There are also issues associated with inadequate or poorly located down pipes and box gutters. There are areas of failing fabric in some of the rear rooms and buildings and a leak in the central clerestory roof. The narrow stairs do not meet modern standards and circulation within the complex is a particular issue as the main building was constructed as two separate self-contained residences flanking a central telegraph room. There is also a general need for an update and review of the building as a whole and its colour scheme.

3. The La Perouse Monument

The main physical issues associated with the monument are the somewhat unsympathetic paint colours, the security of the site and the fixing and ongoing conservation of the ships plaques.

4. Père Receveur's Tomb

As for the monument the main issues are the somewhat unsympathetic paint colours, the security of the tomb and its long-term conservation of the tomb and the inscription.

5. Bare Island Fortress

The Bare Island fortress has inherent and ongoing problems associated with the use of sub-standard concrete in the original construction. This has resulted in ongoing water ingress issues exacerbated by the build-up of soil on a waterproof membrane, above the gun batteries, which allows rainwater to pour into the complex. The bitumen floor has been built up with drainage

channels filled in and there are blockages in the complex underground drainage system. The water storage system is not well understood and areas that are currently propped require investigation and repair. Water ingress and sitting water is also causing deterioration of cast iron and steel structural members within the complex. Areas of failed fabric are located at the junction of the Barracks building with the arc of guns and with the addition of a bathroom for the former caretakers behind the barracks. Sealed, unventilated courtyard rooms are subject to a build up of condensation, while open rooms are accessed and damaged by birds. Missing fabric, particularly doors and windows allow weather damage to a number of rooms.

The access bridge appears to be in good condition following extensive work in 2006/7; however, access by vandals and security is a real issue for the long-term conservation of the Fort.

See the Building Inventory sheets for descriptions and required works for individual buildings and structures.

6. Archaeological Resources

The Aboriginal and Historical archaeological resource is generally representative rather than exceptional. The items under greatest threat are the Aboriginal and European rock carvings which are deteriorating over time. The rate at which these items are deteriorating is not well understood. There is a local impression that they are fading quickly, perhaps faster than elsewhere in Sydney. This suggests local conditions such as exposure and prevailing and intensity of winds are accelerating the natural weathering process.

The local Aboriginal community use the engravings for teaching purposes and there have been local community suggestions to re-cut the existing engravings so they are not lost and so that cultural practices associated with the engravings can continue. If re-engraving was to be proceeded with, there would be a DECC requirement for a Section 90 Aboriginal Heritage Impact Permit (Consent to Destroy) to enable the process to take place. Best conservation practise would not recommend this; best practice would be for the re-creation of the engravings on suitable expanses of adjacent sandstone platforms or outcrops using traditional techniques, which would allow the continuation of cultural practises. A monitoring program to measure the rate of deterioration should also be undertaken, together with measures to reduce the sand, salt and wind effects that would extend the life of the engravings. Mitigating measures to reduce the erosion effects are proposed in Section 10.3.7 Actions 11 and 12.

8.3 Social Values

8.3.1 Assessment and Community Consultation

A Social Values study for the La Perouse Headland has been undertaken by the specialist firm Context Pty Ltd, in parallel with and to provide input to this Conservation Management Plan (CMP). The Social Values Assessment (SVA) involved the assessment of the social significance of the La

Perouse Headland based on an understanding of, and respect for, community attachments and meanings held now and in the past. The purpose of the project was to:

- Identify contemporary attachments to the place, both Aboriginal and non-Aboriginal, local and broader
- Clearly document these attachments and examine them as part of an understanding of the heritage significance of the place
- Identify the community groups and individuals that have, or may have, particular attachments to the La Perouse Headland, including adjoining landowners/managers, local Aboriginal groups, Traditional Owners and individuals and others who have worked at La Perouse including past and present DECC staff
- Recognise ongoing Aboriginal cultural associations and values, both with the historic and present landscape and with past evidence of Aboriginal occupation and settlement
- Ensure that these particular social and cultural attachments are considered in ongoing management of the place and its context.

The project team comprising Dr Sandy Blair and Chris Johnston held a series of community workshops; two with the local Aboriginal Community (11th May 2007 & 6 March 2008), one with the French community hosted by the Consul General of France (5 March 2008), one with the local community (12 May 2007) and a final community workshop (8th May 2008) bringing together all of the community and cultural groups. As well, interviews were conducted with recreational user groups including fishing groups, diving and scuba clubs.

The workshops created the opportunity for an exchange of views among participants. The final community workshop provided the opportunity to understand the aspirations and values of the different cultural groups with a strong and close connection to the headland.

A broad range of ideas including the range of stories represented in the history of the headland, visions for the future look of the headland, its occupation and use and actions and policies were identified in the workshops. See *La Perouse Headland, Botany Bay National Park, (North), Social Values Assessment* prepared by Context Pty Ltd, 2008 for the full outline of the outcomes of the workshops. Key ideas that were outcomes of the visions for the future look of the headland were: -

- An open, uncluttered landscape with extensive coastal views has been retained,
- An Aboriginal presence (both traditional and contemporary) is evident in the landscape, activities and interpretation,
- Some areas of native vegetation have regenerated,
- More of the buildings are publicly accessible and in regular use,

-
- Locals and visitors enjoying the sun, sea and sand,
 - Local enterprise, market stalls, sale of Aboriginal artefacts and art works,
 - Recreational users including divers, canoeists, walkers, rock and pier fishing,
 - People interested in history, soaking it up and experiencing multiple stories through activities, signage and tours,
 - The museum is a hub of exciting stories, activities and changing exhibitions, and
 - There are harmonious relationships between all groups, working together on common goals.

The range of input has been taken into consideration and underpins the outcomes of this CMP.

8.3.2 Existing Stakeholder Financial and Voluntary Contributions

The Friends of the Laperouse Museum

The Laperouse Museum was established as a Bi-centenary Project to commemorate the expedition of La Pérouse and was an initiative of the Laperouse Association, for the Australian Bi-centenary.

The La Perouse Association was re-constituted as the Friends of the Laperouse Museum, when the Museum commenced its operations, to maintain ongoing participation and support.

The Laperouse Association raised \$350,000 through sponsorship and public subscription toward the establishment of the Museum and the Friends of the Laperouse Museum have continued to provide sponsorship for specific projects, events and materials (eg \$50,000 toward the refurbishment of the Instrument Room).

The French Government

The French Government has made a significant contribution to the French monuments and the Laperouse Museum. Of the 1.3 million dollars raised to establish the Museum, the French Government contributed \$450,000 and gifted and loaned numerous objects to the Museum. In addition the French Consulate General (Sydney) continues to make an annual contribution of around \$5,000 towards the upkeep of the monuments.

The La Perouse Precinct Committee

The La Perouse Precinct Committee (LPPC) is a community Forum open to all residents and/or ratepayers and includes businesses. It is an independently run committee established primarily as a link between residents, businesses and/or ratepayers and Randwick City Council to provide feedback to Council managers and Councillors. The LPPC recognises Parks and Wildlife as the major land holder in La Perouse, whose policies and decisions impact residents/ratepayers and businesses operating in the neighbourhood. There has been intermittent attendance by NPWS representatives to LPPC meetings over the years.

In 1997 a joint project was undertaken by NPWS, RCC and LPPC, which involved extensive consultation and resulted in the preparation of the Historic La Perouse Management Plan (HLPMP). In general the HLPMP covers a range of issues including access, parking, management etc, which are issues relevant to masterplanning, dealing mainly with amenity and infra-structure rather than with cultural heritage significance assessment and conservation planning, which is the focus of a CMP.

The Management Plan made a number of recommendations and included a landscape plan. The 1997 landscape plan is recognised as a valuable reference for future landscape planning and should be considered in the formulation of the new landscape plan, recommended in this report.

8.4 National Statutory Legislation

8.4.1 The National Heritage System

Places on the National Heritage List are protected under the Environment Protection and Biodiversity Conservation Act 1999.

A new national heritage system started on January 1, 2004. *The Australian Heritage Council (Consequential & Transitional Provisions) Act 2003*, repealed the *Australian Heritage Commission Act*, amended various acts as a consequence and allowed the transition to the new heritage system.

The Environment and Heritage Legislation Amendment [E&HLA] Act (No.1) 2003 amended the *Environment Protection & Biodiversity Conservation Act 1999*.

It established a new *National Heritage List* of places of national heritage significance. The obligation arising from listing is that a person must not take an action that has, or will have, or is likely to have, a significant impact on the national heritage values of a national heritage place, without approval from the Australian Government Minister for the Environment & Heritage.

Neither the La Perouse Headland nor any individual items are currently listed on the National Heritage List. The southern part of Botany Bay National Park and specifically the Kurnell Peninsular are currently listed on the National Heritage List.

This report finds that the set of late nineteenth century fortresses designed by Scratchley and Jervis located around Australia are likely to meet National Heritage criteria and thresholds. Bare Island Fort is thought to be the most intact and therefore the best surviving representative example of that set.

Bare Island Fort is expected to be recognised as a place of national heritage significance value if/when a nomination is prepared for Australian Forts in general or specifically for the late nineteenth century set of Forts in Australia.

For properties on the National Heritage List that are not entirely within Commonwealth lands, the Commonwealth must do its best to prepare and implement management plans in co-operation with the relevant States and Territories. Inclusion on the new National Heritage List may have implications for the management of the La Perouse Headland.

Government Authorities and Agencies such as DEC that own or control a place with National Heritage values must make all reasonable steps to assist the Commonwealth Minister for the Environment and Heritage and the Australian Heritage Council with identifying, assessing and monitoring a place's heritage values.

Section 324S of the EPBC Act requires that the Commonwealth Minister must make a written plan to manage the National Heritage values of each National Heritage place. The aim of the plan is to set out the significant heritage aspects of a place, required to address all the matters prescribed by Regulation and not be inconsistent with the Commonwealth Heritage Management Principles. The plans should be completed within two years of the commencement of the legislation, or two years from the time the relevant Commonwealth agency became owner of the place, whichever is the sooner.

Matters prescribed by the EPBC Regulation to be included in a Heritage Management Plan include:

- the identification of the place's heritage values.
- constraints and opportunities that those values place on future use,
- owner's requirements, and
- policies and strategies to achieve compatible outcomes.

The effect on items in the vicinity of places listed on the National Heritage List is likely to be worked out in practise. It may mean that NPWS cannot undertake an action that is not in accordance with a management plan prepared in accordance with the EPBC Act, or which has, or is likely to have, a significant impact on the national heritage values of a listed place, without referral to and/or approval of the Federal Minister for Environment and Heritage.

The E&HLA Act 2003 also established a new **Commonwealth Heritage List** of heritage places owned or managed by the Commonwealth. [Not applicable to the La Perouse Headland buildings]

The Australian Heritage Council Act 2003 established the Australian Heritage Council, an independent expert body to advise the Minister. The Australian Heritage Council continues management of the Register of the National Estate.

Register of the National Estate

Listed on the Register of the National Estate are:

-
- The Laperouse Monuments Historic Site: Registered on 21/03/1978, Place ID is 1765, the Place File No. is 1/12/030/0027.
 - The Watchtower: Registered 21/3/1978. Place ID is 1737, Place File No. Is 1/12/030/0004.
 - The Laperouse Memorial Group (The Laperouse Monument & the Tomb): Registered 21/3/1978. Place ID 1736. Place File No. 1/12/030/0003.
 - Bare Island Fort: Registered 21/10/1980. Place ID 1758. Place File No. 1/12/030/0025

The Register of the National Estate is compiled and maintained by the new Australian Heritage Council. It is an evolving record of Australia's natural, cultural and indigenous heritage places that are worth keeping for the future. The Australian Heritage Council will assess these places and maintain the information on places already on the Register. Some places on the Register will receive greater protection under the EPBC Act.

The Australian Government Minister for the Environment and Heritage must have regard to information in the Register in making any decision.

Places on the Register are protected under the EPBC Act by the same provisions that protect Commonwealth Heritage Places. The provision relevant to the La Perouse headland is:

Actions taken by the Australian Government or its agencies which are likely to have a significant impact on the environment anywhere, will require approval by the Minister.

8.5 State Heritage System

Statutory registers provide legal protection for heritage items. In NSW legal protection generally comes from the Heritage Act, 1977 (amended 1998) and the Environmental Planning and Assessment Act 1979.

8.5.1 National Parks and Wildlife Act 1974 as amended 1998

The NSW National Parks and Wildlife Act (NPWA) 1974 established the NSW National Parks and Wildlife Service (NPWS now also referred to as the Parks and Wildlife Group), which is part of the Department of Environment and Climate Change (DECC).

The main function of the NPWS is to administer national parks and other lands under the *National Parks and Wildlife Act* and under the *Wilderness Act*. NPWS also have responsibility for threatened species under the *Threatened Species Conservation Act 1995*.

The purpose of reserving land as national parks is to identify, protect and conserve 'areas containing outstanding or representative ecosystems, natural or cultural features or landscapes or phenomena'.

Among the other types of reserves established under the NPWA is a historic site. These are areas that are sites of buildings, objects, monuments, features or landscapes or are associated with a person, events or historical themes of cultural significance. Dedication as an historic site can facilitate greater involvement of private enterprise and commercial opportunities, than is generally allowed in a national park.

Plan of Management

Management Plans must be prepared 'as soon as practicable' for national parks, historic sites, nature reserves and karst conservation reserves, upon which the community can comment, and which is endorsed by the Minister for the Environment. The headland is included in the **2002 Plan of Management for Botany Bay National Park**. The Plan of Management recommends that conservation; interpretation and other management actions carried out at the La Perouse Headland are consistent with this conservation management plan.

Leases and Licences in National Parks

The Minister can grant leases within a national park to provide accommodation and facilities and licences to carry out trade or business activities.

Protection of Historic Heritage

The NPW (Land Management) Regulations 1995 provides protection for 'any deposit, object or material evidence relating to the settlement or occupation of ...a part of New South Wales...more than 25 years old' on Service estate (cl. 13 (3) (d)). This requires that consideration be given to the importance of even relatively recent physical evidence of the Headland's occupation, including earlier NPWS management and conservation works.

The Historic Heritage Information Management System (HHIMS)

The Historic Heritage Information Management System (HHIMS) manages information on around 9000 heritage items, most of which are in national parks and reserves. It also includes information on a large number of documents and studies into these heritage items. HHIMS replaced the previous NPWS Historic Places Register in August 2002. It enables the NPWS to meet its obligations under Section 170 of the *NSW Heritage Act*.

National Parks & Wildlife Service, HHIMS

Listed buildings and items on the La Perouse Headland are the:

Bare Island Fort,

Cable Station,

Watchtower,

La Perouse Monument,

Père Receveur's Grave,

Gardens and Lawns, and

Overall listing for the La Perouse Headland.

Protection of Aboriginal Heritage

Items of Aboriginal heritage are protected in NSW under the *National Parks & Wildlife Act 1974* (as amended). The DECC, incorporating the NPWS, administers s.87 and s.90 of the Act which provide for Aboriginal Heritage Impact Permits (AHIPs). These are required prior to any works, which may directly or indirectly impact upon Aboriginal items. This includes conservation measures, archaeological investigation and works, which will destroy all or part of a site. These Permits are not issued without evidence of Aboriginal community consultation. The DECC Aboriginal Heritage Information Management System (AHIMS) contains records of recorded Aboriginal sites in NSW including places of importance to the Aboriginal community which have no physical manifestations or are natural features associated with myths and stories.

Items listed on DECC AHIMS for the La Perouse Headland are:

AHIMS #

45-6-648 Engraving of a Whale and calf

45-6-649 Engraving Fish and Tomahawk

45-6-650 Engraving of a faint circle with 'peculiar segmental marks'

45-6-651 Engraving of two deeply cut Boomerang-like marks, one with a reverse curve.

45-6-652 Engraving of a shark? 13'6" long

45-6-653 Vertical Engraving of 1 kangaroo and 1 incomplete Kangaroo

45-6-1144 Shell midden

45-6-1145 Shell midden

The problems with the information for each recorded item on the AHIMS Aboriginal site database have already been discussed [See Section 4.0]. Any proposed conservation works, detailed art recordings or site excavation will require a s. 87 or s.90 AHIP.

8.5.2 The NSW Heritage Act 1977 as amended in 1998

Relics

The Heritage Act provides for the protection of relics older than 50 years. An Excavation Permit is required to 'damage, despoil, move or alter' (s. 129A (b)).

An Excavation Permit issued by the NSW Heritage Council is required where the disturbance or excavation of land is likely to result in a relic being discovered, exposed, moved, damaged or destroyed.

The Manager of the DECC, Cultural Heritage Division has delegations under the Heritage Act for the activities on Parks estate including, to determine applications for certain minor works affecting archaeological relics, and to issue excavation permits.

The Heritage Act also requires that significant places managed by the NPWS be entered onto the NPWS Heritage and Conservation Register (Heritage Act s. 170 Register). NPWS management of places on the s. 170 Register must recognise the identified significance and importance of the place. The Heritage Council needs to be advised of any proposed works or development affecting places on a s. 170 Register.

8.5.3 State Heritage Register (SHR)

Protection of heritage items or places is provided by listing places on the State Heritage Register and by the provision for making interim heritage orders for the protection of heritage items or places.

The Heritage Council of NSW keeps the State Heritage Register. Listing on the SHR and an endorsed conservation management plan [CMP] has a number of management implications for NPWS managers.

Listing on the State Heritage Register means that the heritage item:

- is of particular importance to the people of NSW and enriches our understanding of our history and identity;
- is legally protected as a heritage item under the *NSW Heritage Act*;
- requires approval from the Heritage Council of NSW for major changes; and
- is eligible for financial incentives from the NSW and Commonwealth governments [This may not apply to items in the Parks and Wildlife Service estate].

Bare Island Fort is listed on the State Heritage Register as follows: The Bare Island Fort Database No. 5045621, File No. S92/00980 Listing No. 00978, Gazette Date 02/04/1999, Gazette No. 27, Gazette Page 1546.

Minimum Standards of Maintenance

An amendment to the Heritage Act of 1977 came into effect on April 2nd 1999 establishing Minimum Standards replacing the previous 'wilful neglect provisions'. Owners of items on the SHR are now required to ensure that heritage significance is maintained. Owners are required to achieve minimum standards of maintenance and repair with standards set for:

- Fire protection
- Security

- Essential maintenance
- Weatherproofing

8.6 Environmental Planning and Assessment Act 1979

8.6.1 Protection for Items of Environmental Heritage

The EP&A Act identifies procedures for the authorisation of development on places of environmental significance. Under the EP&A Act, Parks and Wildlife is required to prepare Review of Environmental Factors (REFs) to be assessed before undertaking any activity on National Parks.

The headland and all the current buildings and structures are recognised as places of environmental significance because of their listing on the HHIMS Register.

8.6.2 State Environmental Planning Policy 4 (SEPP4) - Development Without Consent

The requirement for local council consent is waived due to the provisions of State Environmental Planning Policy 4. This requires that proposals for the development upon places of environmental significance be referred to the Heritage Council for comment.

In practice this can be done through the referral of a conservation plan to the Heritage Council, provided that future management and conservation is carried out in accordance with that plan.

8.6.3 State Environmental Planning Policy (Infrastructure) 2007

Under the Infrastructure SEPP work to locally listed heritage items that are not listed on the State Heritage Register will require consultation with local government authorities. This will apply to much of the La Perouse Headland. Under the SEPP some work may be exempt from having to be subject to a Review of Environmental Factors although legislative provisions related to threatened species, Aboriginal and historic heritage still apply.

Guidelines on the SEPP are currently being prepared by DECC and should be referred to in future for information regarding approvals, relevant consultation procedures etc.

8.7 DECC, Parks & Wildlife Division Role

The role of the NSW Parks & Wildlife Division is to protect the state's natural and cultural heritage through the establishment and management of national parks and reserves, and the application of wildlife protection measures by:

- *Managing the pressures on national parks and reserves, including fire, pest animals and weeds*

-
- *Providing opportunities for people to enjoy the park system and at the same time ensuring that any impact on conservation values is minimised*
 - *Undertaking research and monitoring and evaluating the success of conservation activities*
 - *Protecting objects, places and sites of Aboriginal and historic heritage significance within the park system*
 - *Involving communities in park management, including forming co-management partnerships with Aboriginal communities*
 - *Establishing strategic priorities for addition to the park system.*

The role of the **Cultural Heritage Division** is to establish and implement DECC's policies, regulations, programs and technical standards for protecting our cultural heritage by:

- *Working with Aboriginal communities and private and public landowners to protect and conserve Aboriginal cultural heritage*
- *Undertaking research and dissemination to improve the understanding of the nature and distribution of our cultural heritage across the landscape, and to inform decision making*
- *Providing high quality cultural heritage information systems and services*
- *Providing technical services for the conservation of cultural heritage within parks, reserves and botanic gardens*
- *Working with Aboriginal communities and other agencies to develop policies, strategies and programs that support the involvement of Aboriginal people in the management of their traditional lands, waters and natural resources.*

[Refer to DECC, NSW Corporate Plan 2006-2010]

8.7.1 DECC Policy Requirements

It is DECC policy that management and conservation works on significant historic places are to be carried out based upon a conservation plan. This is to be prepared in accordance with the *Burra Charter* and its *Guidelines*.

Conservation plans should address conservation and other management requirements, including interpretation and adaptive reuse.

NPWS can approve CMPs where no major works are proposed and/or where the CMP is unlikely to be controversial. In other circumstances referral to the Heritage Council for approval

still applies. The NPWS provides a copy of draft conservation plans to the Heritage Council for their input prior to endorsement by the Director-General of National Parks and Wildlife.

The DECC also require that management, conservation and investigation of Aboriginal cultural heritage sites be conducted in accordance with the *NPWS DRAFT 1997 NSW NPWS Aboriginal Cultural Heritage Standards and Guidelines Kit*.

S.87 and s.90 Aboriginal Heritage Impact Permits (AHIPs) are required for works, which will impact upon Aboriginal heritage including conservation works. *Interim Aboriginal Community Consultation Requirements for Applicants [Dec 2004]* apply to Permit applicants. These guidelines are currently under review, but essentially require as broad a consultation base as possible and include the requirement for public notification of intended projects that will affect Aboriginal heritage.

8.7.2 Parks & Wildlife Division & Tourism Planning

At the State level *Living Parks*, is a draft sustainable visitation strategy for NSW National Parks. It is partnered with *Towards 2020* – the NSW Tourism Masterplan, which is a commitment by the State government to the future of tourism in NSW. *Living Parks*, *Towards 2020* and arising from the Masterplan, *Our National Treasures - the Nature in Tourism Plan* for NSW, together provide the strategic principles and directions for the development, delivery and management of nature based tourism in NSW. *Living Parks* provides statewide broad strategic direction and establishes principles and priorities for visitor management.

Living Parks will be delivered by a combination of statewide implementation plan and Branch visitor management plans, which will be prepared by the four Parks & Wildlife regional branches. *Living Parks* aims to achieve the following key outcomes:

- Park values protected and conserved
- Enhanced visitor experiences
- Sustainable and culturally appropriate visitor use
- Sound practice in visitor management
- Enhanced community health and well-being
- Economic benefits for communities

Under the NSW State Plan (2006) priorities and actions have been identified in relation to the 'Environment for living'. Priority E8 relates to more people using parks, sporting and recreational facilities and participating in the arts and cultural activities. One target of the plan is to 'increase the number of visitors to the State Government Parks and reserves by 20 per cent

by 2016'. Improving the visitor facilities and amenities within the park will go some way toward doing this

8.7.3 Botany Bay National Park (BBNP) Plan of Management (PoM) 2002

The PoM identifies general objectives relating to the management of National Parks in New South Wales. (See p2 of the 2002 *Botany Bay National Park PoM*). The core values of the BBNP are identified as:

The association with the European expeditions of exploration and settlement and history of contact between indigenous Australians and Europeans.

The symbolism which derives from these initial and later meetings between cultures and the potential to develop on the theme of the 'meeting place' to explore current social issues such as reconciliation.

The scenic landscapes, which define the entrance to Botany Bay.

The retention of the largest remnants of the original vegetation communities of the Kurnell Peninsular and the Eastern Suburbs, and accordingly an important sample of the landscapes, ecosystems and habitats of the Sydney coastline.

The PoM on pp 4-5 also identifies a broader range of values attributed to the Park. Among the broader identified values those particularly applicable to the La Perouse Headland are the recognition of **Social and Historic Values (See pp 4-5 BBNP PoM)**

The long Association between Aboriginal people with the area. (See p4 BBNP PoM for details)

Places of national historic significance including the La Perouse Monument, Macquarie Watchtower, Cable Station and Bare Island.

Material evidence of Aboriginal occupation.

Historical archaeological features.

Natural Heritage Values

A visual counterpoint to the industrial and urban surrounds. (See p5 BBNP PoM)

A mosaic of cultural and natural landscapes.

The native vegetation is an indicator of species present prior to European impacts.

Part of the broader nature conservation system of Sydney and coastal NSW – a key role in maintenance of bio-diversity.

Important for management of conservation in the intertidal zone.

Tourist and Recreational Values (See p5 BBNP PoM)

The long history of recreation and tourist use at La Perouse where people have been attracted to the mix of Aboriginal culture and displays, long running activities such as the snake talks and more recently for visiting Bare Island and the Laperouse Museum.

Important regional and local recreation resource.

Interpretive, educational and research values (See p6 BBNP PoM)

Provides a range of opportunities for culture celebration, nature and historic interpretation, education and research including at the Laperouse Museum.

The primary management objective of the PoM is to protect, maintain and enhance the values identified in the Botany Bay National Park (BBNP). Special emphasis is given to the core values. The aim is met through adherence to the general objectives for national parks together with the following specific objectives relevant to the La Perouse Headland:

To make BBNP a place of significance to all Australians and to contribute to their sense of identity as Australians;

To develop the theme and symbolism of 'meeting place' between the land, the Aboriginal people and the people who have arrived in Australia since 1770;

To provide a lasting venue for recognition and celebration of Australian culture, especially indigenous culture;

To protect and where necessary rehabilitate, the landscapes, ecosystems, vegetation communities, fauna and faunal habitats of the park;

To conserve historic features and significant cultural landscapes;

To promote an understanding and awareness of the natural and cultural heritage of the park through appropriate events, story telling, gatherings and celebration; and

To recognise the relationship and dependence of protected areas to their surrounding landscapes and communities by promoting a cohesive and holistic approach to management of the natural and cultural heritage of Botany Bay.

The above management objectives and aims are supported by policies, management strategies and actions, (See pp 7-37 BBNP PoM) a plan implementation schedule (See pp 41-42 BBNP PoM) and performance measurement criteria (See p 43 BBNP PoM).

8.8 Indigenous Rights

There is legislation and policy at the State and Federal level relevant to indigenous rights and park management. This includes the *NPWA Act 1974*, the *Commonwealth Native Title Act 1994* and the *Native Title (NSW) Act 1994*. This legislation is complex and some of it is summarised as information sheets available on the Department of Aboriginal Affairs and DECC web sites.

Two Ways Together is the NSW Government's ten year plan to improve the well being of Aboriginal people and communities. NSW Government agencies have been focussing on improving the wellbeing of Aboriginal people in:

- health
- housing
- education
- culture and heritage
- justice
- economic development
- families and young people

Two Ways Together recognises that Aboriginal people have inherent rights as the first people of Australia.

These inherent rights include rights of Aboriginal people to determine their social, economic and political futures, and the right to maintain their cultural language and identity.

The objective of *Two Ways Together* most relevant to this study is:

- Supporting and affirming the cultural heritage of Aboriginal people.

8.9 Threatened Species Conservation Act 1995

There is a small area of Themeda Grassland on the headland (See Figure 8.1), which needs to be mapped and may be confirmed as a threatened community, two other pockets of the grass exist at Cape Banks and Henry Head. No other Threatened species have been identified on the La Perouse Headland.



Figure 8.1 The location and extent of the area of Themeda Grassland community on Bare Island. (Image supplied by NPWS Ranger Ben Khan)

8.10 Local Statutory System

8.10.1 State Environmental Planning Policy (Infrastructure) 2007

Under the Infrastructure SEPP work to locally listed heritage items that are not listed on the State Heritage Register will require consultation with local government authorities. This will apply to much of the La Perouse Headland. Under the SEPP some work may be exempt from having to be subject to a Review of Environmental Factors although legislative provisions related to threatened species, Aboriginal and historic heritage still apply.

Guidelines on the SEPP are currently being prepared by DECC and should be referred to in future for information regarding approvals, relevant consultation procedures etc.

8.10.2 Randwick City Council

Local Councils have an increased role in heritage protection, since the introduction of a State government policy that local councils take more responsibility for local heritage protection. Local Environmental Plans (LEPs) and Regional Environmental Plans (REPs) can include special provisions to conserve buildings, landscapes, relics and sites, as well as larger areas like historic precincts.

The La Perouse Headland sits on the southern fringe of the Randwick City Council (RCC) local government area. The Headland is described in the Randwick Local Environment Plan 1998, Zone No.8 (National Parks Zone). See Part 2 Clause 20 for Zone No.8 (National Parks Zone) The area immediately north of the La Perouse Headland is Zoned General Business, backed by Zone No 2D (Residential D - Comprehensive Development Zone), See LEP Part 2 Clause 12A.

See www.legislation.nsw.gov.au/summarize/inforces/s/l/?xdr... for the objectives of the zoning.

Randwick has until 2011 to prepare a new LEP and alongside the review of the LEP, RCC is preparing a comprehensive Development Control Plan. The Council is currently reviewing zonings and related planning provisions. Council is also preparing a number of land use discussion papers, including a paper titled 'Open Space and Environmental Areas'. The papers will be released in 2008, 2009 and be available for community comment. The comprehensive LEP will propose a number of boundary changes to existing conservation areas. For the La Perouse Headland Council's consultants have recommended that the Loop Road and the bus bay be included within the boundary of the conservation area. The Loop Road is currently excluded from the boundaries of both the National Park and the Conservation Area. Further consultation with NPWS is proposed as Council prepares the Draft LEP discussion papers.

The *Randwick City Council Recreation Needs Study* includes a section on Beach and Coastal Reserves (Section 6.5) with a set of proposed principles for Beach and Coastal Reserves. NPWS should be familiar with the above studies and proposals and make comments if deemed necessary.

8.10.3 Randwick Local Environment Plan (LEP) 1998 – Schedule 3

LEPs list specific local heritage properties to which development restrictions apply. The Randwick LEP Schedule of heritage items (Schedule 3) includes the following: -

- Laperouse Museum: Listing No. 38, Gazetted 26th June 1998, Gazette No. 97, Gazette page 5005.
- Bare Island Fort & Causeway: Listing No. 297, 26th Gazetted June 1998, Gazette NO. 97, Gazette Page 5020.
- La Perouse Memorial: Listing No. 300, Gazetted 26th June 1998, Gazette No. 97, Gazette Page 5020.

Listed items outside the study area associated with the La Perouse Headland are Yarra Bay House and the Mission Church (46 Adina Avenue). The Randwick LEP listing recognises the heritage value of the listed places. However, NPWS is exempt from compliance with Local Government planning controls under SEPP 4 and under Part 2 Clause 20 (2) of the Randwick LEP 1998.

Randwick Council is responsible for the Loop Road reserve, within the Headland area. Council has commenced a project to upgrade the Loop Road at La Perouse and has engaged Corkery Consulting to prepare concept designs for the upgrade proposal. The proposal includes substantial changes to parking and traffic flow. In addition the Southern Sydney Regional Organisation of Councils has engaged consultants to prepare a Master Plan for the Botany Bay Trail. The Botany Bay Trail Master Plan Report (draft) prepared by Mike Haliburton & Associates & Transplan P/L proposes the development of a 'Bay in a Day' Trail that would consist of five sections between La Perouse and Kurnell. The northern most section would be the La Perouse-Moulineaux Point Trail. The proposal is for a shared use path linking Botany Bay at La Perouse to Molineaux Point through Frenchmans Bay Reserve and Yarra Bay Bicentennial Park.

There does not appear to be any conflict between the aims of the Randwick Council works and those of NPWS. NPWS should liaise with the Council to determine how the proposed Loop Road works and pathway can best link into the Headland experience.

8.11 National Trust of Australia (NSW)

The National Trust of Australia (NSW) has no statutory authority but is an authoritative community body whose views are generally held in high regard by the community and the various levels of government. It has the following listings:

- Bare Island Fort – Classified 05.3902
- Watchtower – Classified

8.12 Opportunities Arising from Current Use Patterns

There are opportunities for increasing the range of activities and uses associated with the headland and in particular with its buildings. These opportunities range from improving and updating the interpretation in the precinct including in the museum, to continuing and expanding the tours program and identifying new uses for the existing buildings. In the meantime all the significant fabric in the park needs to be maintained.

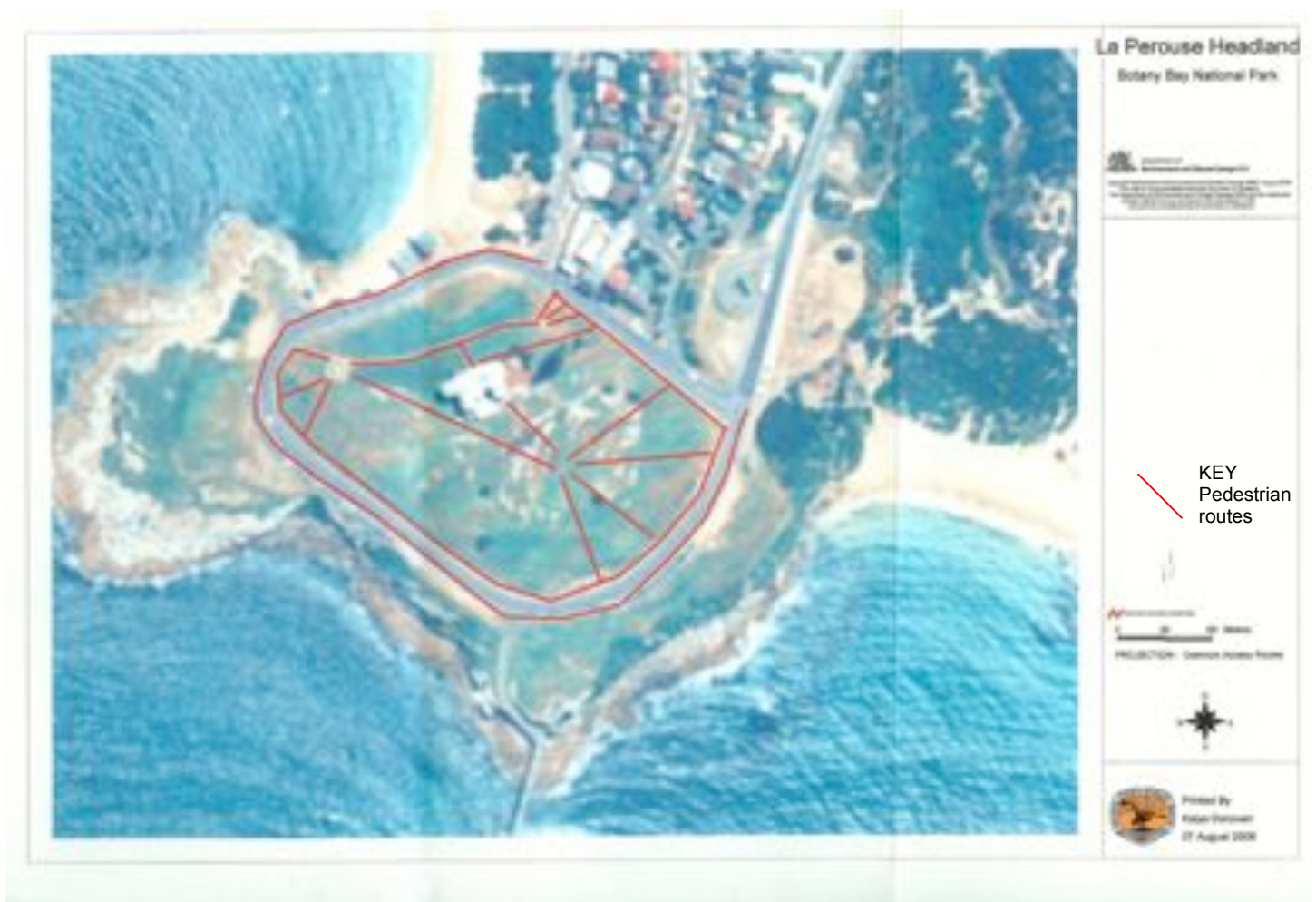


Figure 8.2 The routes generally taken by people over the site, identified by NPWS Rangers who work on the Headland.

Table 8.1 Identifies site uses, unmet needs & associated opportunities.

Existing Site Uses	Visitors/users Typically	Unmet & Partly met Needs	Opportunities	Site Planning
Occasional Day Visitors	<p>Arrive mainly by car</p> <p>Park Car</p> <p>Other options are buses and in future a new ferry service</p> <p>Walk about</p> <ul style="list-style-type: none"> - often elderly - some disabled - some with young children 	<p>Signage</p> <p>Parking</p> <p>Clearly identifiable entrances</p> <p>Links</p> <p>Pathways flat & suited to disabled</p> <p>Seating</p> <p>Easy & disabled building</p>	<p>CLEARLY MARKED PARKING AREAS</p> <p>CLEARLY MARKED ACCESS & INTERLINKED PATHWAYS & ROUTES</p> <p>SIGNAGE</p> <p>ACKNOWLEDGEMENT OF TRADITIONAL ABORIGINAL OWNERSHIP</p> <p>ABORIGINAL GUIDES</p> <p>MEETING POINT</p> <p>DROP OFF & PICK-UP BAYS</p> <p>BUS PARKING</p> <p>FACILITATE PUBLIC TRANSPORT OPTIONS eg re-introduction of a tramway service.</p> <p>SAFE PAEDESTRIAN CROSSING PLACES</p> <p>MINIMISED & MANAGED TRAFFIC</p> <p>OUTDOOR ENVIRONMENTAL OPPORTUNITIES & INTERPRETATION</p> <p>RAMP ACCESS TO SOME BUILDINGS</p>	<p>OUTDOOR CIRCULATION & LANDSCAPE PLANNING</p>

	<p>Look at views & take photographs</p> <p>Picnic &/or visit a nearby cafe</p> <p>Ask about access to Bare Island</p> <p>Visit the Museum</p>	<p>access</p> <p>Toilets</p> <p>Baby change facilities</p> <p>Safe playing areas</p> <p>Viewing sites</p> <p>Café/coffee cart on site</p> <p>Know when & how to access Bare Island</p> <p>Clear opening times, clear signage about what the building is & that it is open to the public</p>	<p>FLAT PATHWAYS</p> <p>TOILETS/CHANGE FACILITIES</p> <p>SAFE CHILDRENS PLAYING AREAS</p> <p>ELDERLY & DISABLED PERSON ACCESS & FACILITIES</p> <p>LOOKOUT</p> <p>VIEWING SITES WITH INTERPRETATION</p> <p>PICNIC SPACES WITH SHADE/GARDENS</p> <p>LICENCE SUITABLE VENDORS</p> <p>CAFÉ/KIOSK</p> <p>CLEAR SIGNAGE WITH OPEN & CLOSING TIMES</p> <p>SIGNAGE CLEARLY VISIBLE FROM A DISTANCE</p> <p>ENGAGING & INTERACTIVE DISPLAYS</p> <p>TAKE THE MUSEUM EXPERIENCE OUTDOORS</p> <p>PROVIDE A PLACE TO TEACH ABOUT ABORIGINAL CULTURE</p> <p>CLASSROOM/ ENVIRONMENTAL CENTRE</p>	<p>INTERPRETATION & PLANNING</p>
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<p>Regular recreation visitors (Divers & fishermen)</p>	<p>Arrive & leave by car with equipment Access the water edges</p>	<p>Designated drop off & pick up point Pathways to water edges that avoid fragile sites/vegetation Nearby parking Dive School/ Fishing School</p>	<p>DROP OFF & PICK-UP POINT PATHWAYS DIVE SCHOOL FISHING SCHOOL SPECIALIST SHOP</p>	<p>RECREATION PLANNING</p>
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By comparison the current headland landscape is much modified from its original low bushland character. (See Inventory 09 Figure 9) This exposes the headland, buildings and visitors to coastal winds and storms that has potential to remove topsoil, damage fabric, including the sand blasting of the Aboriginal rock engravings and makes the visitor experience uncomfortable. The reintroduction of the low and shrubby native bushland on the headland to provide shelter and shade will have several benefits. It: -

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- May provide some shelter to buildings or structures,
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This project identifies a range of themes arising from the preparation of the historical background, the significance assessment and those identified in the Community Consultation and Social Values Assessment Project. See the table titled Stories of La Perouse [p40] for more details of the ideas behind the summary headings. In addition to the ideas arising from the Social Values Assessment consultation, shown in italics, the site survey and investigation into the Aboriginal archaeological resource and buildings identified additional themes, some of which overlap the Social Values Assessment Project findings:

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- Aboriginal coastal archaeological sites and adaptation – foreshore, sea and Bay focus. Material culture and food procurement methods.
- Aboriginal Rock Art, its study and conservation including custodianship and use by the Aboriginal residents of La Perouse.

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- Aboriginal all weather beach net fishing/contemporary stories by families whose members were involved.
 - Aboriginal cultural tourism enterprises of the past – The history of La Perouse Aboriginal residents and their relationship with 'The Loop'.
 - Successful Aboriginal people and role models from the local community.
 - The Dharawal language.
 - *Contact between different cultures – Aboriginal, French British and also more recent migrant groups.*
 - *The La Pérouse expedition and commemoration.*
 - The association with the enlightenment period and the importance of scientific experimentation.
 - *The long history of visiting and recreational use going back to the 1820s.*
 - *It is "home" to local residents, with a different character to elsewhere in Sydney.*
 - *The history of the building and monuments.*
 - Each building has its own story to tell.
 - A long history of military occupation of the headland.
 - The best surviving example of a group of late nineteenth century forts, all designed by the same two experts to meet the changed conditions of the age of steam.
 - The story of meeting the need for a War Veterans Home.
 - The association with particular families and Asian communities who return year round to favourite fishing spots.
 - *The natural history of the headland.*

The above themes should be considered for incorporation of any future Interpretation Plan.

8.15 The Laperouse Museum Collection

The Laperouse Museum collection contains approximately 650 items, relating to either the La Pérouse expedition, the Cable Station building itself or local history encompassing traditions such as the tradition of visiting French ships and the traditions of Aboriginal shellwork and boomerang making. Items from Bare Island, such as artillery shell fragments, Martini Henry rifles, and the surrounding area are included.

A number of items assist with interpreting aspects of French 18th century maritime navigation, but have no direct provenance to the La Pérouse expedition, or assist with interpreting 19th century cable communications, but have no direct provenance to the Cable Station itself.

The collection also includes approximately 1,000 photographs of the local area and Botany Bay National Park, and 100 books in both French and English relevant to the story of La Pérouse or the French exploration of the Pacific.

8.15.1 The La Pérouse Expedition Collection:

Two of the most significant donations to the collection include one incomplete first edition of the *Atlas of the Voyage of Laperouse*, consisting of 24 maps and sketches, donated to the Museum in 1998, and one newer complete *Atlas of the Voyage of Laperouse*, struck in 2003 from original 1796-97 copper plates etched in 1796-97 from sketches sent back to France by officers and crew of the Laperouse expedition.

The Musee de la Marine (Paris) rediscovered the original 1796-97 copper plates in its collection in Paris during the late 1980s. Following conservation work, the plates were found to be in excellent condition and the Musee commissioned a print workshop to re-strike the prints and colour each one by hand. A set of these prints was then donated to the Laperouse Museum in 2003 by the former French Prime Minister, Michel Rocard, on behalf of the Musee de la Marine (Paris).

The plates feature views and maps of the places the expedition visited between 1785 and 1788 including Alaska, California, Hawaii, Japan, Tahiti, Samoa and finally the east coast of Australia. Plants and animals that were then regarded as highly unusual, such as the chilli plant, passionfruit and the bluebottle jellyfish, are also featured.

The plates from the Atlas have been individually framed and now hang on the walls throughout the museum.

A third significant donation consists of items salvaged from the shipwrecks of the *Astrolabe* and the *Boussole*. These items are highly significant as they are surviving material evidence from the voyage of Jean Francois La Pérouse the explorer. The objects include a fragment of the Astrolabe, a pipe, mill wheel, lead ingot, pulley wheel, brass trumpet, shackle, a coil of wire, timber oak fragments from the ships and a brass stanchion.

There is a collection of medals commemorating the La Pérouse voyage. A number of objects in the collection relate to 18th century maritime navigation and are significant historical objects in their own right, such as graphometers, sundials, barometers, sextants, borda circles, a compass and a Gregorian telescope. There are also a few armillary spheres and globes of the world and one very large ship model. There is also a collection of maps, prints and paintings relevant to French exploration in the Pacific or the La Pérouse voyage.

8.15.2 Cable Station Collection

Other significant items were found during renovations to the Cable Station building itself, or were salvaged prior to the departure of the Salvation Army and the commencement of building works in the 1980s. These items include an ashtray, flowerpots, kettles and small items such as tin children's toys, wooden blocks and pegs.

Part of the collection contains 19th century cable instruments, made in London and relevant to the history of telegraphy and the interpretation of it in the Cable Station, such as a telegraph transformer, fluxmeter, direct current Mil-Ammeter, a telegram capacitor and decade resistance box and a micro-ammeter, ohmmeter, ammeter, galvanometer and a long distance recorder.

8.15.3 Local History Collection

Aboriginal: The making of shellwork and boomerangs, and the selling of them to tourists by the local Aboriginal community is a tradition at La Perouse, dating back more than 100 years. The Museum holds a small collection of shellwork boomerangs, trinket boxes and tiny shoes, and a few wooden boomerangs made at La Perouse, in addition to a sign about boomerang throwing.

The collection also includes sporting trophies won by local Aboriginal community members.

French: The Museum holds a growing collection of metal and wooden plaques presented to it by the captains of visiting French ships. The crew from these ships visit La Perouse to view the La Perouse Monument and the grave of Père Receveur and this is a continuing tradition. Miscellaneous French objects, such as vases, also form part of the collection.

Happy Valley: Kettles, a bed head and other small domestic items from the Depression period and Happy Valley area form part of the collection

La Perouse Tramline: A number of tram signs form part of the collection

Bare Island: Anti aircraft shells, ship ornaments made of anti aircraft shells, lead shot, Martini Henry rifles and bayonets, artificer's toolbox, artillery shell case and fragment, cannon balls, an 1837 gunpowder bath, and an ammunition box

General: Items relevant to the general area include archaeological material excavated from Frenchmans Beach, such as bottles, jars and lids, and dinnerware from the former Colonnade Restaurant at La Perouse.

8.16 Best Practice Rock Art Management

The conservation and management of the rock art on the Headland has become a topic for discussion with some support being shown for re-engraving the existing well-documented rock art sites. However, re-engraving the rock art sites would contradict the best practice approach to the conservation of rock art sites. Rock art site management is underpinned by the principles of

the Burra Charter, which require the least intrusive techniques to achieve the following desired outcomes:

- No further damage to the sites,
- Reduce or eliminate current threats, and
- Support local Aboriginal use of the sites for education purposes.

'Damage' includes the re-scoring of the engraved lines to make them 'more visible'. Recommendations and Actions in Section 10.3.7 address the above desired outcomes.

8.17 An Aquatic Reserve

The declaration of an Aquatic Reserve or Marine Park around Bare Island has been suggested in a number of the community workshops.

The *Fisheries Management Act 1994* provides for the declaration of aquatic reserves. The Minister for Primary Industries may declare an area to be an aquatic reserve by publishing a notice in the NSW Government Gazette. The purpose of aquatic reserves is to enhance the protection of fish and fish habitat in the area concerned. Each reserve and the activities prohibited or regulated in it are regulated by the NSW Fisheries Management (Aquatic Reserves) Regulation 1995.

(See www.edo.org.au/edonsw/site/factsh/fs05 for more information on Aquatic Reserves).

NPWS, in consultation with recreational fishermen and divers, should support such a declaration, as it would assist in future interpretation and educational initiatives.

Table 8.1 Identifies site uses, unmet needs & associated opportunities.

Existing Site Uses	Visitors/users Typically	Unmet & Partly met Needs	Opportunities	Site Planning
Occasional Day Visitors	<p>Arrive mainly by car</p> <p>Park Car</p> <p>Other options are buses and in future a new ferry service</p> <p>Walk about</p> <ul style="list-style-type: none"> - often elderly - some disabled - some with young children 	<p>Signage</p> <p>Parking</p> <p>Clearly identifiable entrances</p> <p>Links</p> <p>Pathways flat & suited to disabled</p> <p>Seating</p> <p>Easy & disabled building</p>	<p>CLEARLY MARKED PARKING AREAS</p> <p>CLEARLY MARKED ACCESS & INTERLINKED PATHWAYS & ROUTES</p> <p>SIGNAGE</p> <p>ACKNOWLEDGEMENT OF TRADITIONAL ABORIGINAL OWNERSHIP</p> <p>ABORIGINAL GUIDES</p> <p>MEETING POINT</p> <p>DROP OFF & PICK-UP BAYS</p> <p>BUS PARKING</p> <p>FACILITATE PUBLIC TRANSPORT OPTIONS eg re-introduction of a tramway service.</p> <p>SAFE PAEDESTRIAN CROSSING PLACES</p> <p>MINIMISED & MANAGED TRAFFIC</p> <p>OUTDOOR ENVIRONMENTAL OPPORTUNITIES & INTERPRETATION</p> <p>RAMP ACCESS TO SOME BUILDINGS</p>	<p>OUTDOOR CIRCULATION & LANDSCAPE PLANNING</p>

	<p>Look at views & take photographs</p> <p>Picnic &/or visit a nearby cafe</p> <p>Ask about access to Bare Island</p> <p>Visit the Museum</p>	<p>access</p> <p>Toilets</p> <p>Baby change facilities</p> <p>Safe playing areas</p> <p>Viewing sites</p> <p>Café/coffee cart on site</p> <p>Know when & how to access Bare Island</p> <p>Clear opening times, clear signage about what the building is & that it is open to the public</p>	<p>FLAT PATHWAYS</p> <p>TOILETS/CHANGE FACILITIES</p> <p>SAFE CHILDRENS PLAYING AREAS</p> <p>ELDERLY & DISABLED PERSON ACCESS & FACILITIES</p> <p>LOOKOUT</p> <p>VIEWING SITES WITH INTERPRETATION</p> <p>PICNIC SPACES WITH SHADE/GARDENS</p> <p>LICENCE SUITABLE VENDORS</p> <p>CAFÉ/KIOSK</p> <p>CLEAR SIGNAGE WITH OPEN & CLOSING TIMES</p> <p>SIGNAGE CLEARLY VISIBLE FROM A DISTANCE</p> <p>ENGAGING & INTERACTIVE DISPLAYS</p> <p>TAKE THE MUSEUM EXPERIENCE OUTDOORS</p> <p>PROVIDE A PLACE TO TEACH ABOUT ABORIGINAL CULTURE</p> <p>CLASSROOM/ ENVIRONMENTAL CENTRE</p>	<p>INTERPRETATION & PLANNING</p>
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8.15.1 The La Pérouse Expedition Collection:

Two of the most significant donations to the collection include one incomplete first edition of the *Atlas of the Voyage of Laperouse*, consisting of 24 maps and sketches, donated to the Museum in 1998, and one newer complete *Atlas of the Voyage of Laperouse*, struck in 2003 from original 1796-97 copper plates etched in 1796-97 from sketches sent back to France by officers and crew of the Laperouse expedition.

The Musee de la Marine (Paris) rediscovered the original 1796-97 copper plates in its collection in Paris during the late 1980s. Following conservation work, the plates were found to be in excellent condition and the Musee commissioned a print workshop to re-strike the prints and colour each one by hand. A set of these prints was then donated to the Laperouse Museum in 2003 by the former French Prime Minister, Michel Rocard, on behalf of the Musee de la Marine (Paris).

The plates feature views and maps of the places the expedition visited between 1785 and 1788 including Alaska, California, Hawaii, Japan, Tahiti, Samoa and finally the east coast of Australia. Plants and animals that were then regarded as highly unusual, such as the chilli plant, passionfruit and the bluebottle jellyfish, are also featured.

The plates from the Atlas have been individually framed and now hang on the walls throughout the museum.

A third significant donation consists of items salvaged from the shipwrecks of the *Astrolabe* and the *Boussole*. These items are highly significant as they are surviving material evidence from the voyage of Jean Francois La Pérouse the explorer. The objects include a fragment of the *Astrolabe*, a pipe, mill wheel, lead ingot, pulley wheel, brass trumpet, shackle, a coil of wire, timber oak fragments from the ships and a brass stanchion.

There is a collection of medals commemorating the La Pérouse voyage. A number of objects in the collection relate to 18th century maritime navigation and are significant historical objects in their own right, such as graphometers, sundials, barometers, sextants, borda circles, a compass and a Gregorian telescope. There are also a few armillary spheres and globes of the world and one very large ship model. There is also a collection of maps, prints and paintings relevant to French exploration in the Pacific or the La Pérouse voyage.

8.15.2 Cable Station Collection

Other significant items were found during renovations to the Cable Station building itself, or were salvaged prior to the departure of the Salvation Army and the commencement of building works in the 1980s. These items include an ashtray, flowerpots, kettles and small items such as tin children's toys, wooden blocks and pegs.

Part of the collection contains 19th century cable instruments, made in London and relevant to the history of telegraphy and the interpretation of it in the Cable Station, such as a telegraph transformer, fluxmeter, direct current Mil-Ammeter, a telegram capacitor and decade resistance box and a micro-ammeter, ohmmeter, ammeter, galvanometer and a long distance recorder.

8.15.3 Local History Collection

Aboriginal: The making of shellwork and boomerangs, and the selling of them to tourists by the local Aboriginal community is a tradition at La Perouse, dating back more than 100 years. The Museum holds a small collection of shellwork boomerangs, trinket boxes and tiny shoes, and a few wooden boomerangs made at La Perouse, in addition to a sign about boomerang throwing.

The collection also includes sporting trophies won by local Aboriginal community members.

French: The Museum holds a growing collection of metal and wooden plaques presented to it by the captains of visiting French ships. The crew from these ships visit La Perouse to view the La Perouse Monument and the grave of Père Receveur and this is a continuing tradition. Miscellaneous French objects, such as vases, also form part of the collection.

Happy Valley: Kettles, a bed head and other small domestic items from the Depression period and Happy Valley area form part of the collection

La Perouse Tramline: A number of tram signs form part of the collection

Bare Island: Anti aircraft shells, ship ornaments made of anti aircraft shells, lead shot, Martini Henry rifles and bayonets, artificer's toolbox, artillery shell case and fragment, cannon balls, an 1837 gunpowder bath, and an ammunition box

General: Items relevant to the general area include archaeological material excavated from Frenchmans Beach, such as bottles, jars and lids, and dinnerware from the former Colonnade Restaurant at La Perouse.

8.16 Best Practice Rock Art Management

The conservation and management of the rock art on the Headland has become a topic for discussion with some support being shown for re-engraving the existing well-documented rock art sites. However, re-engraving the rock art sites would contradict the best practice approach to the conservation of rock art sites. Rock art site management is underpinned by the principles of

the Burra Charter, which require the least intrusive techniques to achieve the following desired outcomes:

- No further damage to the sites,
- Reduce or eliminate current threats, and
- Support local Aboriginal use of the sites for education purposes.

'Damage' includes the re-scoring of the engraved lines to make them 'more visible'. Recommendations and Actions in Section 10.3.7 address the above desired outcomes.

Note: There is a requirement for an Aboriginal Heritage Impact Permit (AHIP) approving any further rescoring of these sites and AHIP requires broad consultation with the Aboriginal community.

8.17 An Aquatic Reserve

The declaration of an Aquatic Reserve or Marine Park around Bare Island has been suggested in a number of the community workshops.

The *Fisheries Management Act 1994* provides for the declaration of aquatic reserves. The Minister for Primary Industries may declare an area to be an aquatic reserve by publishing a notice in the NSW Government Gazette. The purpose of aquatic reserves is to enhance the protection of fish and fish habitat in the area concerned. Each reserve and the activities prohibited or regulated in it are regulated by the NSW Fisheries Management (Aquatic Reserves) Regulation 1995.

(See www.edo.org.au/edonsw/site/factsh/fs05 for more information on Aquatic Reserves).

NPWS, in consultation with recreational fishermen and divers, should support such a declaration, as it would assist in future interpretation and educational initiatives.

9.0 Vision & Conservation Policy

9.1 Vision for the Future Management of the Park

Precinct Vision Statement

It is recognised that the values of the place and the vision and aims for the future and the policy outcomes will necessarily extend beyond the artificial administrative boundaries of the La Perouse Headland site.

The following Vision Statement encapsulates the vision and aims of the future management policies for the La Perouse headland, arising from the findings of the Summary Statement of Significance and consideration of workshop inputs and relevant constraints, issues and opportunities.

The La Perouse Headland is a place where the significant themes and stories associated with its history, and the stories of the local environment, culture, characters and communities, can be told.

It is a place where multiple connections are encouraged and promoted.

Opportunities will be provided to enable people to personally tell their stories and to engage in the experience of a more vibrant headland.

The following General Conservation policies for the La Perouse Headland are framed to retain identified significance, set appropriate future use options and enable procedures by which the above vision can, in the long term, be realised.

9.2 General Conservation Policy

- 1) The La Perouse Headland is recognised as a place of National and State heritage significance.
- 2) The primary aim will be to interpret the significance of the place and to provide improved facilities and opportunities for the enjoyment of locals and visitors.
- 3) The Aboriginal community will be actively involved in conservation management and interpretation.
- 4) NPWS will enable and actively promote opportunities for people to tell their stories and to appreciate other people's stories associated with: -
 - the diversity and range of connections,
 - the history of the headland,
 - the headland environment,

-
- the earliest occupation history of the place,
 - the local characters and communities,
 - the significance of the site in a state and national context.
- 5) The La Perouse Headland will be a place where spatial, physical, historical and cultural connections within the place, with its neighbours and with related places are established, explored and promoted.
 - 6) Public access to the La Perouse Headland and recreational use around the Headland will be encouraged and facilitated within the aims outlined in the Vision Statement and in a way that ensures the significance values outlined in Section 7.0 and in Section 8.1 are maintained and enhanced.
 - 7) Uses of the site that will add to the perception of engagement and activity around the site as a whole and/or that will make the individual experience more energetic and active will generally be encouraged.
 - 8) Opportunities will be provided as they arise to continue to explore and demonstrate the pre-contact and contact history of the area and the ongoing Aboriginal historic associations with the place.
 - 9) Interpretation of the environment, the history and the significance values of the place will be recognised as fundamental to its conservation and there will be a site wide approach.
 - 10) Design of the site experience will take into consideration historical and emotional attachments to the place and will aim to present a diverse experience.
 - 11) Design of the site experience will take into consideration the potential for impacts upon and the conservation requirements of significant items at the site.
 - 12) The scenic values of the La Perouse Headland including the perception of an 'open, uncluttered' landscape, will be considered in the approach to management of the landscape. (See 9.4 for policies on the Setting of the La Perouse Headland)

9.3 Management and Planning Approach

- 13) Management of the La Perouse Headland will be in accordance with best practice standards in conservation.
- 14) Management of the site will recognise all the values of the place [Aboriginal, non-indigenous, intangible, natural, archaeological, moveable and intangible heritage values].
- 15) The approach to planning for the Headland as a whole will be to integrate Parks and Wildlife's Vision with the plans being developed by other statutory stakeholders so that the Parks & Wildlife planning for the Headland sits within and makes a positive contribution to

Master Planning for the Peninsular. This maybe through an annual briefing forum as a mechanism for discussion with other agencies. The other stakeholders include:

- Randwick City Council,
- NSW Road and Traffic Authority,
- Tourism Council of NSW,
- NSW Maritime,
- Department of Primary Industry - Fisheries
- Botany Bay National Park: South

- 16) Development within the La Perouse Headland will be planned to complement and enhance the conservation approach and visitor opportunities provided and being developed at Captain Cooks Landing, in the Botany Bay National Park, within the local area and within the region.
- 17) The La Perouse Headland will be managed and conserved in accordance with the following principles and guidelines:
 - the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (the *Burra Charter* and associated guidelines);
 - the Australian Natural Heritage Charter and associated guidelines; and
 - the Draft Guidelines for the Protection, Management and Use of Aboriginal and Torres Strait Islander Cultural Heritage Places.
- 18) There will be a commitment to manage the site in an ecologically sensitive and sustainable manner, for example through the use of new technologies where appropriate.

9.4 Setting

- 19) In consultation with recreation users NPWS will encourage, support and facilitate the declaration of an Aquatic Reserve to protect the waters around the Headland, in consultation with fishing and diving, recreational interests being mindful that such a declaration should provide for Aboriginal access to the natural resources for cultural purposes.
- 20) The general open appearance of the landscape will be maintained whilst the native vegetation remnants are expanded and restored.

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- 21) Views to and from significant landmarks on the Headland (the Macquarie Watch Tower, the access bridge and Bare Island, the Cable Station, Pere Le Receveur's Grave and the French Monument) will be retained and where practical enhanced.
 - 22) Significant views from the Headland, to the Botany Bay heads, to nearby beaches, across the Bay to Kurnell's wharves and monuments and to the distant mountains will be considered and retained in any new landscape works.
 - 23) It is appropriate to consider exotic plantings in the vicinity of buildings and monuments to facilitate understanding the historic use of the site. Bare Island is a special case, which should generally retain its 'bare' aesthetic with native and exotic ground covers, and low native shrubs, except for the former kitchen and herb garden, which can include exotic plantings to illustrate the former use.

9.5 Fabric Management

- 24) Conservation of the La Perouse Headland will adopt a total resource approach that will extend to all areas and elements such as the cultural landscape, cultural deposits, artefacts, moveable objects, records, memories and associations, bio-diversity [native flora and fauna], built structures, along with uses and activities.
- 25) Conservation of the La Perouse Headland will make use of available modern expertise and technology to provide services and to conserve materials.
- 26) Caution will be applied in making decisions, which may damage the natural or cultural environment over time but a cautious approach should not preclude necessary precautionary measures or urgent works to address health and safety concerns.
- 27) Any actions [building adaptation and/or new buildings, landscaping and plantings] that have potential to result in a loss of cultural significance will, where practical, be reversible [i.e. able to be removed without permanent damage to significant historic fabric]. Exception can be made in the case of Aboriginal archaeological sites when necessary, site specific excavation occurs and salvage requirements are met, and in the case of permanent new buildings or works identified as essential to the operation of the precinct to enable the site Vision to be realised.
- 28) The historic La Perouse Headland buildings and the environment will be protected from physical damage by appropriate security and maintenance measures.
- 29) The effectiveness of conservation management of the La Perouse Headland will be monitored. [This involves regular survey of the condition of fabric and plantings and of the visitor experience. A pro-active management approach is necessary to respond to

potential issues that the monitoring identifies]. (See Monitoring & Assessment section 9.17)

9.5.1 Management of Rock Art Sites

- 30) The Aboriginal rock art sites on the Headland will be protected by the continued absence of signage and promotion and will be allowed to weather over time. Vegetation restoration will include screening of the rock engravings to reduce current impacts from exposure to the elements. (In consultation with the Aboriginal community, including Traditional Owners, consideration can be given to the re-creation of the known images on another rock platform distant from the originals, to pass on the tradition and for interpretive purposes.)
- 31) The carving of the prone European form will also be allowed to weather over time and be managed by the continued absence of signage and promotion. This carving should also be protected from accelerated weathering by strategically placed vegetation. The carving itself and any substantiated new information on the historical background of the carving can be interpreted elsewhere on the site or in the museum.

9.6 Building & Structures Management

- 32) See Inventory Sheets for specific Conservation Policies: -
 - No.1 Macquarie Watch Tower
 - No.s 2-5 Cable Station
 - No. 6 Père Le Receveur's Tomb
 - No. 7 The La Perouse Monument
 - No. 8 Miscellaneous Items
 - No. 9 The Bare Island Fortress
 - No. 10 The Headland Landscape

9.7 Aboriginal Custodianship

- 33) NPWS acknowledges that the Aborigina peoples are the original custodians of the lands and waters, animals and plants of New South Wales and recognise the Traditional Owners of the La Perouse Peninsular.
- 34) The La Perouse Headland will be a place where opportunities and support will be provided for Elders to pass on culture and tradition to young Aboriginal people and where young people will be given opportunities to learn and practice cultural activities.

9.8 Use

- 35) The La Perouse headland is recognised as a contested space with many owners, where managers will balance use on the site within the context of competing interests.
- 36) The primary use of the La Perouse Headland encapsulated in the Vision Statement is as a place where people are given opportunities to tell their stories. (This aim supports interpretation, oral history programs, demonstrations, re-enactments and Aboriginal guided tours.)
- 37) The secondary aims are to develop the place as an integral component of a larger landscape where the connections both spatial and historical are encouraged and appreciated. This aim means that uses that illustrate and/or facilitate connections will be encouraged such as pedestrian pathways and vehicular traffic management.
- 38) Continuity of historic uses such as recreational activities on and around the headland, the Snakeman shows and as a venue for the sale of local Aboriginal craftwork will be encouraged and facilitated where practical.
- 39) Access by Aboriginal people to Aboriginal sites and the wider landscape to which they have social and traditional connections and to natural resources for cultural purposes will be facilitated where practical.
- 40) It is appropriate to hold large events on the headland, especially those related to its history, including re-enactments and local fairs/markets for local crafts.
- 41) Access by the French community to the sites they are associated with, the monument, grave and museum will be continued and facilitated where practical.
- 42) Within the above aims and uses, the kind and intensity of educational, research and recreational use will be managed to minimise environmental impacts and to maximise safety and educational opportunities.
- 43) Use of site elements for commercial purposes [including for the provision of events and dining/café experiences and overnight accommodation] may occur where these purposes are not in conflict with the significance of the site, the significance of the element concerned or with the site interpretation.
- 44) The place, or individual elements, may be used for educational and community events, provided that there is no permanent physical impact on significant site fabric.
- 45) Dogs will continue to be prohibited within the Botany Bay National Park. However BBNP South will work with Randwick City Council to limit impacts to native fauna and to the regeneration of native species.

9.8.1 Museum

- 46) An ongoing museum role is recognised as appropriate on the headland. However, it is desirable that ongoing funding is allocated to provide a high quality museum experience.
- 47) The potential for the museum and its activities to be an important and accessible cultural centre and place where stories are exchanged through exhibitions, events and community projects will be recognised and encouraged through allocation of spaces, appropriate funding and staffing, including the use of suitably experienced or trained volunteers.
- 48) The headland stories may be allocated a particular internal space but should also extend into the headland landscape and building complexes, through exhibitions, permanent installations, events and interpretation.
- 49) The headland will be a learning landscape for the local natural, coastal environment of Botany Bay and for its history of occupation and use by Aboriginal people and European explorers and settlers.
- 50) The museum collections will be managed in consultation with appropriate community representatives (for example the French Consul General for the French Collection and Aboriginal representatives for the Aboriginal Collection and the local community).
- 51) Acquisitions for permanent collections should be limited to items provenanced to the site or with strong local environmental and Aboriginal associations with the site and with high interpretive potential.
- 52) Permanent collections that are not always on display may be securely stored off site when not required if on site storage is not available or appropriate.
- 53) It is appropriate for each building or monument to be the main location where it's own history is explored.

9.9 Associated Communities (Consultation & Involving)

- 54) Formal and informal networks and mechanisms for consultation with the community and stakeholders will be maintained and/or established as required for practical management purposes. For example by the formation of one or more consultative groups with one or more meetings each year or by some other mechanism such as a 'Friends' group, a stakeholders group and/or the production of a newsletter.
- 55) Communities that may be consulted and actively worked with include:
 - Aboriginal people about the range of cultural and management matters (including identifying specific individuals within the community for particular issues/matters).

- the French and Catholic communities;
 - the broader Botany Bay communities, and
 - recreational user groups who regularly use the site.
- 56) Consultation protocols (who should be consulted over what issues) will be determined at an early stage and will guide future consultation programmes. This will include consultation with: -
- Aboriginal people about the range of cultural and management matters including identifying specific individuals within the community for particular issues. Matters to be discussed will include employment management advice.
 - The French/Australian community, especially on decisions that may affect the Laperouse monuments, the museum and its collection.
 - Recreational users about proposed changes that may affect them.
- 57) Opportunities for informal exchanges with stakeholders and interested individuals will be actively fostered.
- 58) Opportunities will be provided for people to come into and use the space for their activities, for example by the sympathetic insertion of pathways, barbecues and other outdoor furniture and shade planting.

9.10 Other Interested People/Sponsors/Volunteers

- 59) Opportunities for enabling site visitors to have more input into key directions for the La Perouse Headland may be pursued where appropriate. These may include use of visitor surveys to seek views on conservation issues; focus groups and other forms of surveying the views of the wider community; and involving visitors in consultative processes on new plans and major issues.
- 60) Corporate sponsorship through formal agreements may be considered by Parks management if determined to be in the best interests of preserving and/or enhancing the significance of the place.
- 61) Mechanisms for the involvement of volunteers in appropriate roles such as meet and greet, providing directions and as guides may be developed.

9.11 Visitors

- 62) Visitor management will endeavour to provide high quality visitor experiences and opportunities to experience the multiple stories of the headland.

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- 63) Promotion and encouragement of visitation to the La Perouse Headland will be progressively staged to reflect the capacity of the available staff, accommodation, activities and infrastructure.
 - 64) It is appropriate to manage potential visitor impacts actively, for example by limiting visitation to Bare Island, limiting traffic and parking and uses that might impact on fragile fabric, including the rock art sites.
 - 65) The visitor experience will be thoughtfully enhanced where possible with the sympathetic provision of pathways, seating, shade and signage.
 - 66) It is appropriate to link the La Perouse Headland experience for visitors with neighbouring and historically related places through spatial links and by cooperating with adjacent Botany Bay National Parks attractions, with the local tourism network and tourism initiatives and through other active means such as interaction with Aboriginal people through guided tours, with the aim to attracting visitors appreciative of the natural and cultural significance of the site.
 - 67) Facilities for visitors will be provided within the existing buildings where possible, although modern technology reflecting a commitment to sustainability goals, which may require the addition of small low-key purpose built structures may also be considered.
 - 68) Non-essential visitor facilities, attractions or activities that will have a negative impact on the cultural significance, character or feeling of the La Perouse Headland will be avoided and/or removed from the site.
 - 69) NPWS recognises that there is high level of visitor interest in an Aboriginal cultural experience and will support community initiatives to provide such experiences.

9.11.1 Disabled Access

- 70) Access for people with disabilities will be provided and will be designed in accordance with the Commonwealth 'Access Guide to Heritage Buildings'. Owing to the primary requirement for retention of significance and conservation, it is recognised that it will not be possible, in every case, to provide comprehensive disabled access.
- 71) Wheelchair and disabled access will be a consideration in the selection of locations and in the design of interpretation installations and routes where the provision of such access will not compromise the significance of the buildings or sites.
- 72) The design of any new building on the site that caters for interpretation or amenities should include disabled access.

9.11.2 On-site Vehicle Management

- 73) It is appropriate for NPWS to work with Randwick City Council and other agencies to restrict and manage vehicular access to the headland (including Bare Island) and to actively control vehicular circulation, especially at night.
- 74) The number and distribution of parking spaces on site will be actively monitored and controlled by signage and barriers to minimise impacts on important views, on the grounds and the native vegetation.
- 75) It is appropriate to make provision for short-term drop off and collection parking for specific on-site activities such as the heavy equipment associated with diving and for elderly visitors.
- 76) Future site circulation planning will aim to encourage visitors to experience the whole headland and the historic buildings, rather than just the headland edges.
- 77) Site circulation planning will also include connections to related places, through walking, ferry and vehicular routes and will provide formal access to the nearby coast and cliff areas.

9.12 Interpretation and Associations

9.12.1 General Interpretive Approach

- 78) The preparation of an Interpretation Plan for the La Perouse Headland is recognised as an important stage in the development of the Headland. The Interpretation Plan will be integrated with other interpretive strategies at Cooks Landing, Kurnell etc. within Botany Bay National Park.
- 79) Selection of themes and messages to be interpreted on site will have primary regard to the significance of the site and the following associations: -
 - The long occupation of the locality by Aboriginal people and their ongoing culture and traditions, in particular long boat fishing and seafood collection.
 - Linkages with other Aboriginal sites and archaeology around Kurnell and Botany Bay.
 - The 'symbolic importance of the 'triangle' of the monument, grave and museum (including its collection) to the French Government, French Australians, veterans, French visitors including sailors, Catholics (including Australian Catholics) and scientists.
 - The strong sense of place.

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- The interaction of cultures and communities.
 - The wider story of French Expeditions and connections to other places, other collections and museums.
 - The military history of the site and its links with other late nineteenth century coastal Fortresses associated with the military defence experts Major General Sir William Drummond Jervis and Lieutenant Colonel Peter Scratchley.
 - The special environmental character of the site.
- 80) Interpretation will extend to contemporary Aboriginal communities, art and archaeological management and to historic activities, structures and landscapes and will, where possible, focus on the historic elements and events in the area, including local bush tucker plants. It will provide opportunities for Aboriginal people to tell their own stories and present their landscape and sites to visitors to engender respect and understanding.
 - 81) Within the interpretation strategy for the Headland, consideration will be given to re-introducing Aboriginal names in consultation with Aboriginal representatives, either in parallel with existing European names or in appropriate circumstances, instead of the current names.
 - 82) Local Aboriginal representatives will be consulted in the formulation of appropriate site-specific conservation strategies and interpretation of the Aboriginal history and associations of the site. (See Section 10.0, Action 7, for the process of establishing consultation protocols.)
 - 83) The approach to interpretation may extend beyond the La Perouse Headland to include other neighbouring features, providing an understanding of the place in its archaeological, historical, geological, geographical, social and military context.
 - 84) Virtual links with related places may be explored through the DECC web site design and by using other cutting edge technologies.
 - 85) Messages to be conveyed in interpretation will be prioritised and communicated to all involved in working on the site, including site managers, caretakers, guides and volunteers.
 - 86) Opportunities will be provided for visitor interaction with cultural heritage elements of the site – consistent with physical conservation requirements.
 - 87) Interpretation programs and initiatives will be undertaken in a manner, which minimises impact on the fabric of significant elements.
 - 88) Consideration should be given to establishing additional annual events at the La Perouse Headland, designed to involve the local community.

89) It is recognised that people and events associated with the Headland's history are aging and that the fabric and context of the place is rapidly changing. The recording of oral and visual (i.e. video, photographs, digital recordings etc) histories will be a high priority for interpretation and funding.

9.12.2 Interpretation and the Laperouse Museum

90) Local history, environmental and indigenous stories will be a key focus of interpretation within the museum, in keeping with the museum's Statement of Purpose.

91) The local Aboriginal story will be updated and put back in the Permanent Exhibition.

92) A key objective of the design of interpretation within the Laperouse Museum will be to establish links into the surrounding landscape, including visual and physical links with surrounding places like Bare Island, the Macquarie Watchtower, Kurnell etc.

93) A key aim for interpretation within the museum will be the use of a variety of interpretive media to maximise audience engagement.

94) Modern techniques and technologies will be utilised where possible to make the museum experience a vibrant and memorable one.

9.13 Future Development

95) It is appropriate to actively consider new uses and adaptive re-use of the existing building complexes to meet the aims identified in the Vision Statement. Low impact adaptive re-use options are particularly appropriate for under-utilised buildings.

96) Proposals for change of use to the site, parts of the site or individual elements will be considered on the basis of a thorough understanding of the impact of the proposal/s on the significance of the place.

97) A range of economically and environmentally sustainable, compatible uses can be considered for the Headland including: -

- recreational;
- café, food and beverage;
- functions and events;
- meetings and training;
- venue hire;
- museum, gallery;
- Aboriginal cultural centre/place;
- meeting space;

-
- community uses including markets;
 - guided and self-guided tours;
 - planting of a bush tucker garden.
- 98) It is appropriate for use of the existing buildings on the site to reflect the history of occupation where several uses and users co-existed within the same complex, in both the Cable Station building (dual tenancy with shared spaces and ancillary spaces) and to a lesser extent at Bare Island (accommodation, re-enactments and artillery positions).
- 99) Consideration of future development options should aim to provide a diverse representation of the history of the site and acknowledgement of the Aboriginal associations with the place. Rock art conservation (reduction of the sand blasting effect of the weather) should be given funding priority.
- 100) In considering adaptive re-use options for the site and new uses it is appropriate to consider public/private partnerships (i.e. public land/buildings and private enterprises that could help use and sustain buildings) and to facilitate compatible Aboriginal enterprises, including training for Aboriginal youth and employment opportunities.

Promotion and Marketing

- 101) Promotion of the La Perouse Headland may be pursued through production of a web site, brochure, signage, active promotion and other marketing initiatives.

9.14 Limits of Future Development

- 102) It is recognised as desirable that all the existing buildings are used or re-used before construction of new buildings is considered.
- 103) The history of relatively dense occupation on the La Perouse Headland (See Figures 5.3 and 5.4) may justify additional sympathetic building in strategic locations if there is a compelling reason and no practical alternative. See Figure 10.2 for locations that can be considered for new development, subject to archaeological research and investigation findings.
- 104) The essential aesthetic quality of the Headland as a windblown, coastal landscape with widely physically separate building groups and landmarks will be maintained, within the context of the aims of the Vision Statement. (Note that this policy does not preclude the regeneration and expansion of native coastal bushland or the use of planting to manage and minimise weather and visitor impacts).
- 105) Commercial opportunities will be limited to new uses that are low impact and compatible with the aims and objectives of NPWS.

9.15 Research

- 106) The Parks & Wildlife managers of the La Perouse Headland will, where practical facilitate environmental and historical research related to the site where studies will contribute to the rehabilitation of the environment and/or to the interpretation of the place.
- 107) Formal links will, where possible be established by the Parks & Wildlife Group with relevant research institutions and individuals, and relevant Aboriginal organisations so that research is encouraged and focused on priority areas.
- 108) Ongoing research will be a source of information that may contribute to rehabilitation works, physical conservation activity and interpretation.
- 109) Research projects, oral histories and archaeological surveys that have potential to provide information about the Aboriginal use of the greater Botany Bay area will be supported and facilitated where possible.

9.16 Financial Resources

- 110) Capital works programs and budgets will be prepared and prioritised on a long-term basis, recognising the need for total management of the La Perouse Headland.
- 111) Ongoing contributions from the French Consulate General (since 1988) and contributions from the community and corporate contributions (both financial and in voluntary work) may be encouraged through appropriate mechanisms and groups such as a support group or 'Friends group'. All such programs will be subject to approval and supervision by NPWS.
- 112) It is recognised as important that adequate resources are allocated to provide a high quality museum experience, including funding for short-term exhibitions.
- 113) It is appropriate to consider commercial opportunities through building leases or other fees that would provide funding to assist with conservation and other programs that support the Vision for the site.

9.17 Monitoring and Assessment

- 114) Ongoing monitoring is a basic conservation tool for the La Perouse Headland, which will provide information needed for management decisions.
- 115) A program of regular monitoring and assessment will be instigated to address environmental (natural and cultural), user and social (visitor interpretation and experience) issues subject to Parks priorities and resources at the time.
- 116) The monitoring and assessment program should always include: -

-
- Repairs
 - New works
 - Conservation works
 - Costs
 - Income

In addition monitoring may include the collection of data on an annual basis for one or more of the following: -

- Visitor numbers, origins and type of use;
- Regrowth issues;
- Feral and domestic animal management issues
- Rock art conservation (in consultation with the Aboriginal community).

117) Ongoing visitor evaluation will occur, to assess the effectiveness of interpretation and conservation measures, visitor access, visitor facilities and visitor numbers and impacts.

118) The monitoring and assessment program should also consider new and continued existing use impacts on the values identified for the site and other potential issues identified by the site Project Manager may also be considered.

9.18 New Buildings

119) In general the existing historic buildings should be fully occupied and/or utilised before any new buildings are considered.

120) Small scale, sympathetic additions or alterations to existing buildings can be considered if they are judged necessary to make appropriate new uses feasible.

121) It is appropriate to consider re-instating former structures associated with the historic building complexes, if such buildings/structures would make new uses viable and sustainable. (For example the former Stable Shed on Bare Island, and the former skillion addition to the Macquarie Tower.

9.18 Review

122) This Conservation Management Plan should be reviewed at a maximum of ten yearly intervals or when major changes occur on the Headland.

10.0 Implementation Recommendations

Preamble: This section sets out a strategic management approach for the implementation of the conservation policies set out in Section 9.0. The implementation has been developed keeping in mind the need to provide practical, staged advice for the long-term retention of identified significance values and the conservation of the building/heritage fabric. It addresses appropriate uses, works, new building opportunities, conservation measures and management.

The approach outlined in the following section has been identified during the consultation component of the project and in workshops. **'Actions'** are essential works. **'Recommendations'** are considered to be the best approach to retain the significance of the site, but are optional, rather than essential. It is important to note that the recommendations are appropriate from a heritage point of view but may never be proceeded with.

Management of the La Perouse Headland will aspire to best practice standards in conservation.

Management of the site will recognise all the values of the place [Aboriginal, non-indigenous, natural, archaeological and moveable heritage values].

The approach to planning for the Headland as a whole, will be to integrate PWGs Vision with the plans being developed by other statutory stakeholders including: -

- Randwick City Council,
- NSW Road and Traffic Authority,
- Tourism Council of NSW,
- NSW Maritime, and
- Botany Bay National Park;

so that the PWGs planning for the Headland sits within and makes a positive contribution to Master Planning for the Peninsula.

Development within the La Perouse Headland will be planned to complement and enhance the conservation approach and visitor opportunities provided and being developed at Captain Cooks Landing, in the Botany Bay National Park, within the local area and within the region.

The La Perouse Headland will be managed and conserved in accordance with the following principles and guidelines:

- the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (the *Burra Charter* and associated guidelines);
- the Australian Natural Heritage Charter and associated guidelines; and

-
- the Draft Guidelines for the Protection, Management and Use of Aboriginal and Torres Strait Islander Cultural Heritage Places.
 - full local Aboriginal community consultation and ongoing participation.

There will be a commitment to manage the site in an ecologically sensitive and sustainable manner, for example through the use of new technologies where appropriate.

10.1 Immediate Risk Management Works

Works to be carried out as soon as practical

No immediate risk management works have been identified for the site under the current management regime. However, should public usage or access be increased, then some risks will be exacerbated as follows: -

Bare Island

Risks at Bare Island are currently managed by limiting public access to guided tours. Should Bare Island be considered for access to the public, other than through guided tours, then risk management works would be required related to failed fabric and more safety rails. See Inventory Sheet No. 9 for Risk Management Works required for Bare Island.

Cable Station

Two chimneys at the rear of the building have been identified as potential but not immediate structural risks. The timber staircases in the Cable Station leading to the first floor, are narrow and steep and do not meet modern Building Code specifications. No accidents have been reported to date. However, should public usage of the building increase, then the risk associated with use of the stairs will increase, and alternatives for first floor access will need to be considered. (See Inventory Sheet No.2 for one option) The uneven courtyard surface is a low risk, which is increased during periods of rain when the paving is slippery and water pools.

10.2 Building Catch Up Works [1-2 Years]

The works for individual buildings are detailed in the inventory sheets. See individual Inventory sheets for the recommended Catch-Up Works for each building, which are provided as: -

Immediate Risk Management Works

Short Term Catch-Up Works (1-2 years)

Medium Term Works (1-5 years)

Long Term Works (1 -10 years)

10.2.1 Urgent Building Catch-Up Works

The survey of the buildings within the precinct found the following urgent Catch Up Works: -

The Cable Station Battery Building (inventory No. 3)

The Battery Building is in urgent need of re-pointing. Failure to undertake this work in the next 1-2 years may lead to failed areas of brickwork, public safety risks and greatly increased repair costs associated with restoration of failed fabric.

The Cable Station (inventory No. 2)

The leaks in the clerestory roof should be addressed as a matter of urgency as the water ingress will damage internal fabric. The longer it is left the more additional fabric will need to be repaired/replaced.

Bare Island Fortress (inventory No. 9)

Water ingress and/or leaking water tanks above the vehicular entrance to the Barracks courtyard is damaging the concrete roof, which is presently supported by marine plywood panels above Acro props. This area may be in danger of collapse if it is not addressed within the next 1-2 years. The roof should be exposed and properly assessed for urgent repair works. This will become a public safety risk issue if the damage is allowed to continue and the repair costs will increase the longer it is left and the more water damage is sustained.

10.2.2 Building Catch-Up Works [1-2 Years]

The other main Catch Up Works that should be addressed within 1-2 years but are not as urgent as those listed above are:

Macquarie Watch Tower: See Inventory No. 01

- ongoing rising damp problems;
- issues associated with poor roof and ground water drainage, and
- unsympathetic building repairs during the 1960s rebuilding work.

The Cable Station: See Inventory No.s 02-05

- re-pointing of the former Battery Room (see urgent works above)
- leak/s in the clerestory roof, (see urgent works above)
- Inadequate roof and ground water drainage in the courtyards, and
- flaking plaster walls in the rear rooms,
- identification of a new colour scheme,
- repainting and
- minor areas of failed fabric in the ancillary buildings.

La Perouse Monument: See Inventory No.06

- potential associated with some of the means of fixing plaques to the monument to impact on the long-term preservation of the monument fabric.

Père Receveur's Grave: See Inventory No.07

- assess paint condition and appropriate future treatment of the fabric.

Miscellaneous Items: See Inventory No.08

- no immediate works

Bare Island: See Inventory No. 09

- investigation of the roof of the vehicular entrance to the Barracks courtyard, (see urgent works above)
- major ground water management issues, mostly related to the build up of soil cover above the waterproof barrier;
- areas of failed fabric mainly associated with ingress of water and the poor quality of the original mass concrete, and
- missing or failed, mostly timber and joinery fabric.

All works that disturb the ground need to be preceded by a Review of Environmental Factors (REF) See Section 8.5.1. This plan can be recognised as the equivalent of the 'Cultural Assessment' component of the REF.

1. Action: Allocate sufficient funding to employ suitably qualified and experienced building specialists to carry out the Catch Up Works.

2. Action: Carry out catch-up works to all the buildings as specified in the Inventory Sheet 'Catch-Up Works' Sections and according to the sketch plans provided, over the next 1-2 years.

3. Action: Organise Excavation Permit/s and for the recommended drainage works and works that require excavation and engage a suitably qualified and experienced archaeologist to monitor the works. (Aboriginal Heritage Impact Permits are not likely to be required in the highly disturbed areas, but should be sought for other areas as required.)

10.3 Short Term Actions (High Priority,1-2 Years)

The successful presentation of the site and implementation of this CMP requires clear lines of communication and co-operation within Botany Bay National Park and with the Sydney South Region.

10.3.1 Active Management Consultation & Liaison

4. Action: NPWS will promote a seamless presentation and management approach to the La Perouse Headland through active consultation and co-operation with the managers of Botany Bay National Park and with the Sydney South Region. This will involve a disciplined and co-operative project approach and regular liaison.

10.3.2 Community Liaison

5. Action: Establish an ongoing dialogue with the local community and interested stakeholders through the formation of a Consultative Committee (or some other title) that meets regularly.

6. Action: Identify a person by position or role who will be responsible for establishing a Briefing Forum to make contacts and form ongoing relationships with agency representatives with a role on the headland including Randwick City Council, NSW Roads and Traffic Authority, the Tourism

Council of NSW, NSW Maritime and Department of Primary Industries- Fisheries. The Briefing Forum will meet at least once a year.

7. Action: Establish consultation protocols (who should be consulted over what issues) in consultation with the Aboriginal community, the French/Australian community and the local and recreational users.

10.3.3 Aboriginal Custodianship

NPWS acknowledges that the Aboriginal people are the original custodians of the lands and waters, animals and plants of New South Wales and recognise the Dharawal Elders as the knowledge holders of the La Perouse Peninsula.

The La Perouse Headland will be a place where opportunities and support will be provided for Elders to pass on culture and tradition to young Aboriginal people and where young people will be given opportunities to learn and practice cultural activities. Opportunities will be taken as they arise to continue to explore and demonstrate the pre-contact and contact history of the area and the Aboriginal historic associations of the place. These endeavors will be conducted by community members and knowledge holders.

8. Action: NPWS will consult with the Local Aboriginal Land Council and Traditional Owners to establish protocols, including for:

- acknowledgement of country;***
- the interpretation of Aboriginal heritage within the precinct;***
- management of Aboriginal heritage within the precinct.***

9. Action: If the community is in favour of an acknowledgement, then a process for the selection of an appropriate expression and location of that acknowledgement should be commenced. A 'gateway' location that can be considered is proposed in the New Buildings and Structures Concept Plan (See Figure 10.2).

10.3.4 Living History Project

People with memories of the early twentieth century history of the La Perouse Headland are an increasingly scarce resource. Their stories will in the long term, be an important input to the interpretation of the place and will serve the dual purpose of being a cultural record as well.

10. Action: Apply for funding and/or seek sponsorship to commission a Living History Project on behalf of the La Perouse community, including the Aboriginal community as soon as possible, building on existing projects. The project should include an audit to avoid duplication of effort and should make use of modern technologies and include oral history records and where possible visual recordings. The project should build on existing projects and the outcome should be incorporated in the interpretation of the site where appropriate.

The people interviewed should if possible include members of all the different communities and users of the site; the local indigenous and non-indigenous community, the French and Catholic communities, the Snake Man and the various recreational users as well as veterans and/or their descendants and others who occupied the site comparatively briefly e.g. women and their children who occupied the Cable Station when it was a Salvation Army Refuge.

Recommendation: Collaborate widely, including with Randwick Historical Society, the La Perouse Precinct Committee, the La Perouse Aboriginal Land Council and with the Randwick City Council Librarian to undertake the Living History Project.

11. Action: The NPWS will actively encourage and support the continuity of historic activities associated with the site. These include the Snake Man displays and the selling of local crafts and boomerangs by the local indigenous population. For example NPWS may distribute advertising material for the Snake Man, choose to make a craft room available to the local community and sell local crafts in their outlet/s. NPWS may also support cultural activities such as a long net fishing day as an annual event.

10.3.5 Museum Strategic Plan

Preparation of a Museum Strategic Plan should be a priority, so that future works contribute to the overall vision and planning for the occupation and use of the spaces within the Cable Station complex. The Museum Plan should also identify areas not required for museum use that will become available for compatible new uses including commercial opportunities. New uses will be constrained by the primacy of conservation needs. Compatible additional uses include but are not limited to study centre use, community meeting rooms, café/restaurant use, function centre use and/or wedding reception venue.

12. Action: Preparation of a Museum Strategic Plan that identifies a vibrant vision for the museum and for the use of the building spaces and identifies areas available for compatible new uses, will be a high priority.

Recommendation: Review the current use of the museum floor space with a view to incorporating display, education, community meeting rooms, retail, office, café and other commercial functions.

10.3.6 Museum Exhibition Development Plan

13. Action: Develop a Museum Exhibition Development Plan to upgrade and revitalize the museum display and building use, to create a more vibrant and engaging indoor and outdoor experience.

Recommendation: The museum storyline should be developed and revised to interpret relevant key themes keeping in mind that not all headland stories have to be held within the museum.

Recommendation: The museum upgrade must result in a better representation of Aboriginal history and culture, unless it is addressed elsewhere.

14. Action: As part of the revitalization of the Laperouse Museum, explore the recovery of replicas of early memorial inscriptions, particularly that of the inscription carved into a eucalyptus trunk by the crew of the Coquille in 1824, (currently held in the Musee de la Marine [Paris]) and Pere Receveur's altar stone and if recovery is not possible, explore the possibility of acquiring a copy/ or copies for the Laperouse Museum.

Recommendation: In the short term contact the Musee de la Marine (Paris) to determine if there are replicas of the early memorial inscriptions and arrange a loan.

Recommendation: In the medium term if a permanent loan is not possible, investigate getting replicas made for permanent exhibition at the Laperouse Museum site.

Recommendation: Consider locating the replicas of early memorials outdoors, in or close to their original locations.

10.3.7 Marketing and Promotion

15. Action: Investigate preparation of a Marketing Plan for the La Perouse Headland as a joint promotion with the Randwick City Council (Randwick City Tourism Inc).

Recommendation: Explore options for joint promotions with Randwick City Tourism Inc.

Recommendation: NPWS could give consideration to joining a team with Randwick City Tourism Inc. to produce a Guide to Aboriginal Randwick, along the lines of 'Aboriginal Sydney' by Hinkson and Harris, which will also encourage participation from Aboriginal people throughout the municipality and identify and promote complementary commercial Aboriginal enterprises.

Recommendation: Explore the possibility of marketing a La Perouse Headland experience at Sydney International and domestic airports, especially the possibility of providing short, guided tours for people in-between flights.

10.3.8 Guided and Self Guided Tours, Guides and Guide Training

Guided tours are an integral component of the current management approach to the site, the museum and to Bare Island. Over time it is desirable that information and where appropriate, self-guided tours are readily available for people whose visit doesn't coincide with a tour, and who don't enter the Laperouse Museum in the Cable Station building.

Recommendation: Consider preparing self-guided interpretive material and/or a brochure about Bare Island as an interim measure until an Interpretation Plan is prepared for the site. Brochures should be low key and easily reproduced and may request a donation and/or have a 'Please return when you have finished' request on them.

Recommendation: Continue to use guided tours as a means of explaining the site and bringing it to life. Explore and trial ideas, such as re-enactments, to make the tours better known and more engaging.

Recommendation: Introduce tours with a focus on the local Aboriginal culture and the environment that are led by Aboriginal guides.

Recommendation: If training is needed for Aboriginal people as guides then a specific person should be appointed to be responsible for liaising with government bodies to identify available funding and to set up a one off and/or on-going guide training scheme/s.

10.3.9 Recognition of Heritage Significance

The Bare Island Fortress is thought to be the most intact representative example of the group of around thirteen late nineteenth century fortresses designed by the British military experts Jervois and Scratchley, that are located around Australia (and in New Zealand) and among the other forts that they modified. Those purpose built late nineteenth century fortresses are identified in this report as a set within the larger Australasian fort population, which represent the technology of a particular period and are associated with particular designers and historical conditions. As such the fortress group appears to meet National Heritage List criteria and thresholds. However, more research and survey of the fort group is required to be completely confident that Bare Island Fort is the most intact and best surviving representative example of the set. A nomination for the group should also be prepared to confirm the significance status of the late nineteenth century fortress group.

Recommendation: The Parks and Wildlife Group will facilitate research projects that survey and assess forts in NSW and interstate and overseas where possible. If the opportunity arises it will co-operate with other States to prepare a joint nomination for the Late Nineteenth Century Fortress Group.

10.3.10 Landscape Catch-Up Works [1-2 Years]

16. Action: Assess the integrity of the sea wall along the Astrolabe Cove foreshore and remove the Canary Island Date Palms (*Phoenix canariensis*) growing in the sea wall and repair the sea wall as necessary.

10.3.11 Archaeology

Aboriginal Archaeological Management – [1-2 Years]

Note: The main Whale and Calf engraving has been the subject of recent professional recording by David Lambert, a rock art conservation specialist with the DECC.

17. Action: Establish a vegetation screen around the engraved rock platforms including timber and planted thick scrub to limit sand abrasion and wind and salt erosion. The screens need to take into account prevailing winds and be developed as part of the broader landscape/bushland regeneration program.

18. Action: Establish a detailed scientific monitoring program to assess and document the condition of the engravings and their rate of deterioration over time. The monitoring program will include a night-time inspection with halogen light. Sufficient funds should be allocated to ensure a long-term program.

Guidelines for Ongoing Management and Viewing of the Rock Art Sites

- Walking tracks providing access around the Headland should be placed so as to avoid the engravings and access to the sites should be limited as far as possible to guided tours.
- The original engravings are better viewed under oblique natural light or halogen light at night. Viewing as part of an interpretation program or education program should be encouraged at early morning or late afternoon or at night with halogen torches or lanterns.

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- There should be **NO** interpretation, such as fixed signs, in the immediate locations of the engravings.
 - There should be Aboriginal led guided tours only.
 - Brochures on Aboriginal heritage of the Headland should not include specific directions to the individual engravings.
 - The importance of the artwork should be stressed in any signage or brochure and their protected status under the NPW Act should be identified.
 - Make a night recording of the rock art sites prior to installing the vegetation screens around the rock carvings. (See Action 10. above)
 - Monitor the condition of the rock engraving. (See Action 11. above)

Archaeology Management (Historical and Aboriginal) [1-2 Years]

Historic archaeology is not considered under any immediate threat. However, future work by Randwick City Council or the Road and Traffic Authority, NSW (RTA) to rationalise vehicle circulation and parking may impact on historical archaeological sites. There is an existing vertical kangaroo engraving under a random rubble wall beside the road that would also potentially be under threat by new road works.

19. Action: Liaise with Randwick City Council and the RTA to ensure that the location of archaeological sites are known and that procedures are adopted through a Memorandum of Understanding or some other process for dealing with works proposals and works that have potential to impact on archaeological sites.

The procedures should include:

- preparation of a Research Design,
- application for n Heritage Office, Excavation Permit,
- application for a DECC Aboriginal Heritage Impact Permit if required,
- consultation with the local Aboriginal community including Traditional Owners,
- compliance with NPWS REF requirements, and
- archaeological monitoring and/or excavation.

10.3.12 Randwick City Council - Co-operation and Input

20. Action: Appoint a person or include in a role description, responsibility for liaison with Randwick City Council (RCC) and for keeping up with the current RCC review of their LEP and DCP, with their new land use discussion papers, studies and proposals including the upgrade of the Loop Road and the extension of the Coastal Walking Track. That person would also be responsible for organising input and comments to Council from NPWS if deemed appropriate and

to provide updated Aboriginal site database information if new Aboriginal sites come to light at the headland.

10.4 Medium Term Actions (1-5 Years)

10.4.1 Interpretation Plan

Selection of themes and messages to be interpreted on site will have primary regard to the significance of the site and the following associations: -

- The long occupation of the locality by Aboriginal people and their ongoing culture and traditions, in particular long boat net fishing and seafood collection.
- The unique and sustained cultural tourism endeavors of the Aboriginal community
- Linkages with other Aboriginal sites and archaeology around Kurnell and Botany Bay.
- The 'symbolic importance of the 'triangle' of the monument, grave and museum (including its collection) to the French Government, French Australians, veterans, French visitors including sailors, Catholics (including Australian Catholics) and scientists.
- The strong sense of place.
- The wider story of French Expeditions and connections to other places, other collections and museums.
- The military history of the site and its links with other late nineteenth century coastal Fortresses associated with the military defence experts Major General Sir William Drummond Jervis and Lieutenant Colonel Peter Scratchley.
- The special environmental character of the site.
- Interpretation will cover the contemporary Aboriginal community including, art, historic activities and landscape associations. It will provide opportunities for Aboriginal people to tell their own stories and present their landscape and sites to visitors to engender respect and understanding.
- Within the interpretation strategy for the Headland, consideration will be given to re-introducing Aboriginal names in consultation with Aboriginal community representatives, either in parallel with existing European names or in appropriate circumstances, instead of the current names.
- Local Aboriginal representatives will be consulted in the formulation of appropriate site-specific conservation strategies and interpretation of the Aboriginal history and associations of the site.

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- The approach to interpretation may extend beyond the La Perouse Headland to include other neighboring features, providing an understanding of the place in its archaeological, historical, geological, geographical, social and military context.
 - Virtual links with related places may be explored through the web site design and by using other cutting edge technologies.
 - Messages to be conveyed in interpretation will be prioritised and communicated to all involved in working on the site, including site managers, caretakers, guides and volunteers.
 - Opportunities will be provided for visitor interaction with cultural heritage elements of the site – consistent with physical conservation requirements.
 - Interpretation programs and initiatives will be undertaken in a manner, which minimises impact on the fabric of significant elements.
 - Consideration should be given to establishing one or more annual events at the La Perouse Headland, specifically designed to involve the local community.
 - Consideration should be given to commemorating the life and works of prominent and inspirational Aboriginal people from La Perouse. They could include, but not be limited to:
 - Respected elders and leaders;
 - The shell workers and other artists, craftsmen and women, past and present;
 - Local fishermen and/or fishing families acknowledged for their role in long net fishing;
 - Local Aboriginal people acknowledged for community service;
 - Aboriginal people from the community who have achieved literary or academic success; and
 - Aboriginal sporting heroes who have come from or lived in the local community.
 - It is recognised that people and events associated with the Headland's history are aging and that the fabric and context of the place is rapidly changing. The recording of oral and visual (i.e. video, photographs, digital recordings etc) histories will be a high priority for interpretation and funding.

21. Action: Commission the preparation of an Interpretation Plan for the Headland at an early stage with the Stories of the Headland identified from community input summarized in a table in Section 2.2.6 in the La Perouse Headland CMP, Community Consultation and Social Values Assessment – Stage 2 Report (prepared for NPWS by Context in 2008) as a specified primary resource for the Plan.

22. Action: Plan an upgrade of the museum to create an interpretive space that is more inclusive of all those who share the place and its history and to make better use of the existing floor space.

10.4.2 Landscape Character (1-5 Years)

The re-introduction of native vegetation and coastal bushland to areas of the headland will not cause an unacceptable impact on the 'uncluttered' character that has been identified as important to the headland. That character arises mainly from the topography and physical separation of the three main building complexes and the two monuments. (See discussion in Section 8.13)

23. Action: Use the attached Landscape Concept Plan (Figure 10.1) to develop a more detailed landscape concept plan for the Headland and immediate surrounds.

Landscape Plan Guidelines

- Subject to the results of Actions 6 & 7 above, the Landscape Plan should identify appropriate sites where an Aboriginal Memorial could be located and places for the Elders to teach children and interpret Aboriginal culture to visitors.
- Consider a perimeter pedestrian pathway around the inside of the roadway
- Review pedestrian circulation on the headland and provide formed pathways that:
 - Move visitors in from the edges
 - Access and connect individual buildings and structures
 - Connect with safe perimeter road crossing points and with pathways linking to other sites/pathways.
- Review the mix of plants around the entrance to the Cable Station and develop a planting scheme that both enhancing the historic, cultural landscape and takes the opportunity to provide interest and shade. Consideration can be given to re-introducing fenced front yards. Refer to Inventory No.2, Figures 2.14 and 2.15 and to Inventory 2. Long Term Catch-up Works recommendations, last bullet point.
- Provide shade, particularly on the slopes south west of the Cable Station. Suitable plants include Bangalay (*Eucalyptus botryoides*), Coast Banksia (*Banksia integrifolia*), and Coastal Tea-tree (*Leptospermum laevigatum*).
- Provide low-key picnic facilities, particularly on the more sheltered west side of the headland.
- Provide a meeting place for tours to start from.
- Provide screening and shelter to preserve the rock art sites.

Landscape treatments related to individual buildings and structures, where applicable, is generally addressed in the inventory sheets.

Recommendation: Consider re-instating the picket fence around the front yards of the Cable Station. (See P 9 Inventory No.2)

There are several advantages in reinstating the picket fence around the north east and south west garden areas in front of the Cable Station. The garden areas can provide an additional level of interest, provide shade and provide safe playing areas for small children which would be particularly useful if the verandah front were re-used e.g. as a café space.

Recommendation: Cable Station Garden Treatment – Garden plants should be low to medium shrubs and ground plants, not trees as these would impede views to the Cable Station from the entrance side.

One possible treatment of the enclosed gardens would be to extend the existing planting directly in front of the Cable Station, using the plants already there, together with additional local native shrubs. Suitable plants would include Coastal Tea-tree (*Leptospermum laevigatum*), Hibiscus plants, Palm Lily (*Cordyline australis*), Heath-leaved Banksia (*Banksia ericifolia*), Coast Wattle (*Acacia longifolia* ssp. *Sophorae*).

10.4.3 Vehicle Management (1-5 Years)

24. Action: Liaise with Randwick City Council and with the RTA to manage traffic and parking.

Options to be considered that would make the site safer for pedestrians include:

- boom gates and speed limits
- one way traffic or close the northern section of the loop road to traffic
- pedestrian crossings, linking with and new existing routes
- better parking bays,
- a loading and unloading zone adjacent to the road access to Bare Island (for use by divers etc),

Recommendation: Consideration can be given to sensitively enlarging the car park north of the Cable Station.



Figure 10.1 **LANDSCAPE CONCEPT PLAN.**

Key features are:

- **B** is self guiding brochure pick up points
- A pedestrian loop path around the inside of the Loop road
- Paths to take visitors into the centre of the site
- Pedestrian crossings;
- Boom gates to close the site at night.
- Aboriginal memorial/Bush tucker garden option
- Archaeological sites screen planting
- Regeneration & expansion of native plant areas
- Option of a French Garden
- Option to increase Museum parking
- Option to fence the Cable Station front garden
- Option to install a ramp to the south west end of the verandah at the Cable Station
- Pick up & Drop off parking bay

[Google Earth base plan]

10.4.4 Accessibility, Visibility and Linkages

25. Action: Construct a formed path suitable for elderly and disabled people, leading in a straight line to the front door of the Cable Station (boardwalk, concrete slab or another low impact path surface – use a ramp at the west end to address the grade from road level, rather than steps).

Recommendation: Consider linking the pathway to a new disabled person access to the building via a ramp at the south west end of the verandah at the front of the Cable Station building.

Recommendation: Subject to the findings of a Landscape Plan (See 14. Action above) construct connecting pathways between the Cable Station building, Macquarie Tower, Bare Island and linking with the monuments path. See Figure 10.1.

Recommendation: Subject to the findings of a Landscape Plan (See 14. Action above) either construct a perimeter pathway around the inside of the loop at the end of Anzac Parade with access points where adjacent routes terminate. See Figure 10.1.

OR

Liaise with Randwick Council and the RTA to provide pedestrian crossings where adjacent routes terminate so that the logical progression from the link paths is across to the centre of the headland to a network of routes in the centre of the headland.

Recommendation: Install a sign board on the south west end of the pathway to the Cable Station building, which can advertise opening hours, activities and building occupants.

10.4.5 The La Perouse Monument and Père Receveur's Grave

The La Perouse Monument: This monument is the centerpiece of existing celebrations and remembrance ceremonies. It is also a component of an ongoing tradition, where visiting merchant marine captains bring their ships plaques to be mounted at the memorial and more recently in the museum. (See Inventory Sheets No.6 and No.7 for Catch-Up Works)

26. Action: Undertake a conservation assessment of the La Perouse Monument and of Père Receveur's Grave, using a suitably qualified and experienced specialist, including paint scraping to determine the state of the original stone and to recommend appropriate conservation into the future.

Also scrape the iron palisade fencing to determine condition and previous colours.

27. Action: Select an approach to de-clutter the monument and to deal with the addition of new plaques and repair the monument as required.

If possible identify the earliest plaques attached to the La Perouse monument and determine which plaques should remain fixed the monument, and how they can be fixed/re-fixed to minimize damage to the monument itself.

Recommendation: More recent plaques should be removed and managed as discussed in Inventory Sheet No.6. All the plaque relocation options are acceptable from a heritage point of view. Selection of the

preferred option should be made on the grounds of practicality, security for the plaques and ease of integration into an interpretation strategy.

Recommendation: Consider replanting four trees around the La Perouse Monument. Trees should be located outside the perimeter of the monument fence, lined up with the centre of each perimeter wall. Instead of Norfolk Island Pines use hardy coastal plants such as Norfolk Island Hibiscus, Aleppo Pines (Pinus halepensis) or another species with a connection to the French region and/or La Perouse.

Recommendation: In consultation with the French and Catholic communities consider the installation of a small 'French' garden around Père Receveur's Grave. This would make the grave stand out more in the landscape and be a permanent display of the regard that the tomb is held in by the French and Catholic communities.

10.4.6 The Macquarie Watchtower (1-5 Years)

The Macquarie Watchtower is currently closed up and simply a landmark item in the landscape. It is recognized as a difficult building to re-use partly because of some existing unsympathetic repairs carried out in the 1960s and partly because of its comparatively small size, circular shape and single entrance. Historical research shows that for most of the nineteenth and early twentieth century there were skillion additions around the north east side of the base of the tower and the main entrance was in the eastern facet of the tower, not in the southern facet of the tower where the current entrance door is located.

Recommendation: The Macquarie Watchtower should be re-used if possible. (Compatible re-use options identified in the Inventory include interpretation of the history of the Tower itself, temporary displays, short visitor operated interpretive films and ticket selling for tours.) (See Inventory Sheet No.1 pages 16 and 17 for adaptive re-use options.)

Recommendation: Consider installing a faceted, awning roofed addition based on the 1864 addition (See Figure 11,13, 17 and 22 on Inventory Sheet No.1) and reinstating a second doorway in the eastern facet (There was a doorway in the east facet from around the 1830s until the fire in 1957, which was not reinstated in the 1960s works). It would provide a more useful sheltered area and visitors could move through the Tower, rather than being caught in a bottleneck in the single doorway.

Recommendation: Consider incorporating a viewing platform in the awning roofed addition, so that visitors can experience the view from the first floor level of the Watch Tower. (See Inventory Sheet No.1 pages 16 and 17 for adaptive re-use options and a concept plan.)

10.5 Ongoing Actions/Works

10.5.1 Events

28. Action: Encourage and facilitate the continuation of the celebration of existing annual events such as the Bastille Day at the headland.

29. Action: Select and foster new events that will provide a balanced view of the history of the headland (e.g. events that celebrate Aboriginal culture, provide re-enactments and celebrate the history of the place).

Recommendation: Select an annual or more frequent event that will encourage the of the local community to come into the site and the buildings e.g. a local craft fair held mainly in the Cable Station courtyard with other activities in and around the Cable Station building. The craft fair could have as its theme the history of Aboriginal crafts in the area.

10.5.2 Security of Buildings and Structures

Over time as the historic buildings on the headland are increasingly occupied and used, particularly at night, the current ongoing problem with vandalism is expected to decrease.

Lighting (Short to Medium Term)

30. Action: Commission a suitably qualified and experienced lighting consultant to review the lighting of buildings and structures on the headland for security and interpretive purposes and upgrade and replace (using new technology where possible) as required.

Caretakers (Ongoing)

31. Action: Caretakers, selected by NPWS should continue to occupy the Cable Station Building and the Barracks on Bare Island until new uses make the current caretaking arrangements redundant.

Bare Island (Ongoing)

32. Action: Continued use of a guard dog on Bare Island to deter vandals is appropriate; until a judgement is made that the deterrent is no longer required.

Recommendation: When the current bridge accessing Bare Island needs repairs or when vandalism on the Island reaches an unacceptable level, consider replacing the south end of the current bridge with a drawbridge.

Access

Recommendation: Consider using boom gates to block off the Loop road at night.

10.5.3 Monitoring Programs and Impacts

33. Action: Actively monitor and manage visitor use and impacts through informal means and through an annual formal assessment.

Recommendation: Actively monitor the success of revegetation and regeneration programs and provide short-term fencing or other appropriate means to ensure the success of the programs.

Recommendation: Encourage and facilitate continued study of the Headland's history and environment, through providing access, facilities and other appropriate assistance.

10.6 Cyclical Maintenance - Ongoing

10.6.1 Buildings

The Minimum Maintenance Standards [See guidelines supplied by NSW HC] required by the NSW Heritage Office Heritage Amendment Regulation 1999 are recognised as a good example of an appropriate approach to maintenance and underlie the following approach.

- The buildings are to be thoroughly inspected at least once a year (as a minimum) for evidence of deterioration of exterior or interior surfaces. For example deterioration of roofing and exterior timbers and interior linings. They should be made good as required. This will include an inspection for termites.
- Water run-off in the vicinity of the walls of the buildings should be monitored on an ongoing basis and the gutters, drains and stormwater run-off systems should be kept cleared and operational.
- Storm water runoff and garden watering runoff should be monitored and actively managed to prevent pooling around building foundations.
- Inspections should be carried out by the appropriate NPWS staff including the site ranger, and be informed by the Field Officer's observations.
- If the site Project Manager has particular concerns or at 3 to 5 yearly intervals, it would be appropriate to engage a suitably qualified and experienced builder or structural engineer to carry out the inspection and specify catch up works.
- Painted surfaces should be examined on an annual basis and a decision about potential weathering of surfaces should guide the decision to repaint. Surfaces that are currently painted should be repainted in accordance with an appropriate colour scheme preferably reflecting an historic scheme. Surfaces that are not currently painted should generally not be painted.
- The grounds will be maintained in substantially their current form with an expansion of native species that will be designed to preserve key views. Any trees considered by a suitably qualified and experienced person to be a danger should be removed.
- Ground cover in the vicinity of the building should be managed and maintained so that it does not become a fire hazard. Asset protection zones of 50 metres are recommended for each building group.

See Building Inventory Sheets for recommended individual cyclical maintenance works.

Colour Schemes

Existing historic colour schemes should generally continue to be used. Colour schemes may be changed if information about early historical colour schemes becomes available.

Interior colour schemes for historic buildings should be selected to reflect colour schemes of the construction period where possible and may be based on paint scrapings, known early schemes or on colour schemes, known to have been used in similar period buildings.

Recommendation: Paint scraping and colour scheme analysis should precede any major works to historic buildings, where paint scraping has not been taken previously.

10.7 Ongoing & New Use Opportunities for Buildings (1-5 Years)

Bare Island is the priority for Catch-Up Works at the headland with a view to introducing appropriate new uses. The Cable Station complex also requires major periodic maintenance and an exhibition change over.

10.7.1 Bare Island

The arc of the gun battery is not considered suitable for new use, other than an expansion of the existing uses: - guided tours, increased frequency and variety of tours, re-enactments and open days and use as a film set.

The area north of the arc of guns comprising the Barracks, courtyards, parade ground, laboratories and guard rooms are considered to have high potential for re-use when the current water ingress problems above the vehicular entrance and extensive catch-up works are addressed.

Re-use of the Bare Island Barracks will be facilitated by the preparation of measured drawings, which can be used for planning and for advertising the available spaces.

34. Action: Prepare measured drawings for (as a minimum) all the buildings on the north side of Bare Island with re-use potential comprising: - the Barracks buildings, the courtyard, toilets, stores, tanks, the upper parade ground and the laboratories and guard rooms. As the site is very complex consider using photogrammetry to produce the measured drawings. Such a set of drawings can be used to monitor condition into the future.

35. Action: At an early stage advertise for expressions of interest in the re-use of the Barracks and northern buildings at Bare Island, (compatible re-use options identified in the inventory include a scuba diving school, fishing school, a youth hostel, special interest hostel accommodation, retail and café uses).

Recommendation: If possible select a preferred re-use option at an early stage so that works can be specifically targeted to meet the needs of the proposed new tenant/s. A shed similar to the former Stable can be located in the Stable site, if necessary for the re-use. Other new buildings are generally not appropriate.

10.7.2 Cable Station

The Cable Station is an existing building complex that has current use as a museum, caretaker's residence and Parks & Wildlife administration offices. It is important that the existing momentum built up by the museum operation and the liaison with the local community is not lost. Therefore this building should have priority in terms of review of the opportunities offered by the building spaces so that the whole building becomes a centerpiece where visitors can be directed to other parts of the site. The museum use can be compressed into a smaller internal space and expand into outside spaces. If it was better funded, it could provide a more attractive and interactive experience in order to attract more visitors.

New Tenancies

36. Action: Review the use of internal spaces within the Cable Station complex to identify the most suitable floor plan

37. Action: Explore the level of interest from commercial interests and community groups in using the parts of the building identified with new use potential, this may be by advertising for Expressions of Interest, or by some other means.

Guidelines for Works Required for New Uses

Works required to make new tenancies feasible may take place in the short or medium term, subject to the needs of the selected tenants, including the museum tenancy.

Such works should be low impact and reversible.

High impact works can only be considered if they are essential for the sustainable occupation and operation of the building.

If possible high impact works should be located in areas of lower significance, that are significantly modified or where there is failed original fabric.



Figure 10.2 New Buildings and structures concept plan. See inventory sheets for building interior options and for details of concepts. (Base aerial photograph reproduced from Google Earth)

10.8 Long Term Actions/Works (1-10 Years)

Long-term works are specified on individual inventory forms.

10.8.1 New Buildings

New buildings are generally not appropriate on the La Perouse Headland. However, the existing buildings are all historic structures built for very specific purposes, which limits their suitability for a range of new uses.

10.8.2 Friends/Volunteers Group

Recommendation: Consider establishing closer links with military enthusiasts and Veterans groups to form a Coastal Forts (Volunteer) Group, who could help with research about the history of occupation of the fortress and its technology and who maybe interested in undertaking minor joinery repairs and in identifying and replacing missing timber fabric in the Battery Arc area. Such a group would also be good hosts to re-enactments and open days at the Fort.

10.9 Review

38. Action: This report should be reviewed at ten yearly intervals or earlier if major changes to the management approach and site facilities occur.

11.0 Bibliography

Preamble

The following bibliography includes sources used in *LA PEROUSE HEADLAND – A SHARED HISTORY* prepared by Dan Tuck, 200, which is a companion volume referred to in this Report

11.1 Sources

AIAS. 1988. *La Perouse, the Place, the People and the Sea*. A collection of Writing by members of the Aboriginal community. Aboriginal Studies Press for the Australian Institute of Aboriginal Studies, Canberra.

Aird, W. 1961. *The Water Supply and Drainage of Sydney: 1788 – 1960*. Halstead Press, Sydney.

Airey, E. 2005. *The Taming of Distance; New Zealand's First International Telecommunications*, Dunmore Publishing, Wellington, New Zealand.

AITSIS. 2005. *Dawn & New Dawn: 1952 - 1975 - A Magazine for the Aboriginal People of NSW*. CD-Rom compilation of Dawn and New Dawn magazines digitised by AITSIS in association with NSW Department of Aboriginal Affairs; State Library of NSW. Produced by Net Impact Publishing.

Albani, A., Rickwood, P., Johnson, B., & Tayton, J. 1997. *The Ancient River Systems of Botany Bay*. Sutherland Shire Studies Publication No. 8.

Anderson, D (ed.). c.1975. *The Botany Bay Project: A Handbook of the Botany Bay Region*. The Botany Bay Project Committee, Marrickville.

Anon (n.d.) *Vocabulary of the language of N.S. Wales in the neighbourhood of Sydney* (Native and English, but not alphabetical). MS. 41645(c), School of Oriental and African Studies, University of London, London. [c.1790/1 - Authors possibly Phillip &/or Collins].

Aplin, G (ed.). 1988. *Sydney Before Macquarie: A Difficult Infant*. New South Wales University Press, Sydney.

Aplin, G. & Story, J. 1991. *Waterfront Sydney: 1860-1920*. Allen & Unwin, Sydney.

Ardler, G. 1991. *The Wander of it all: Reflections by Gloria Ardler*. Burruga Aboriginal History & Writing Group.

Ashton, P. & McPherson, A. 1993. *Waverley Heritage Study*. Volume 1: Historical Context Report. Report prepared for Perumal Murphy Wu Pty Ltd and the Waverley Council.

Ashton, P. & Waterson, D. 2000. *Sydney Takes Shape: A History in Maps*. Hema Maps, Brisbane.

Ashton, P. 1993. *Waverley Heritage Study*. Volume 3: Landscape Report. Report prepared for Perumal Murphy Wu Pty Ltd and the Waverley Council.

Attenbrow, V. 2002. *Sydney's Aboriginal Past: Investigating the Archaeological & Historical Records*. University of NSW Press, Sydney.

Attenbrow, V. & Steele, D. 1995. 'Fishing in Port Jackson, New South Wales – More than met the eye' in *Antiquity* 69(262): 47-60.

Australia ICOMOS Inc. 1999. *The Burra Charter*. The Australia ICOMOS Charter for Places of Cultural Significance.

Australian Archaeological Survey Consultants Pty Ltd. 1995. *The Waverley Council Area: An Aboriginal Perspective*. Report prepared by Huys, Johnston & Wickman for the Waverley Council.

Australian Customs Service – *Manifest Magazine*, November 1999 quotes David Day, 1992, *Smugglers and Sailors: The Customs History of Australia 1788-1901*. (See also www.customs.gov.au/webdata/miniSites/nov99/page17.htm)

Banks, J. 1962 [1768-1771]. *The Endeavour Journal of Joseph Banks: 1768 – 1771*. Edited by J. Beaglehole. Angus & Robertson, Sydney.

Beauchamp, K. 2001 *History of Telegraphy*, Institution of Electrical Engineers, London.

Bell, J. 1961. 'Some demographic and cultural characteristics of the La Perouse Aborigines' in *Mankind* 5(10); 425 - 438.

Bennett, S. 1865. *The History of Australian Discovery and Colonisation*. Hanson and Bennett, Sydney. SLNSW ML Dixon Reading Room 86/427 (parts 1 - 5).

Benson, D. & Howell, J. 1994. 'The Natural vegetation of the Sydney 1:100,000 Map Sheet' in *Cunninghamia*, 3(4): 677-787.

Benson, D. & Howell, J. 1995. *Taken for Granted: The Bushland of Sydney and Its Suburbs*. Kangaroo Press in association with the Royal Botanic Gardens Sydney.

Benson, D. 1978. *Brief Survey of the Native Vegetation at Long Bay Rifle Range*. Royal Botanical Gardens, Sydney.

Benson, D. 1987. *Assessment of Native Vegetation – Western End of Long Bay Rifle Range*. Royal Botanical Gardens, Sydney.

Bertie, C. 1952. 'Captain Arthur Phillip's first landing place in Botany Bay' in *Royal Australian Historical Society Journal & Proceedings* xxxvii (iii): 107 - 127.

-
- Bickford, A. 1989. 'Aboriginals in New South Wales after 1788' in *Magazine of the Royal Australian Historical Society*. June 1989: 8-12.
- Bigge, J. 1966 [1823]. *The Bigge Report: Report into the Commission of Inquiry on the State of Agriculture and Trade in the Colony of NSW*. Facsimile Edition of Report III - 1823, published by the Libraries Board of South Australia, Adelaide.
- Blake, C. (n.d.). *A Short History of Long Bay*. Randwick City Library Local Studies Reference Collection. LH365.99441/BLA.
- Blaxland Glen, verbal discussion January 2007.
- Botany Municipal Council. 1989. *The Heritage of Botany*. Botany Municipal Council.
- Boughton, C. 1981. *The Coast Chronicle - The History of Prince Henry Hospital: 1881-1981*.
- Bowdler, S. 1971. Bass Point. *The Excavation of a South East Australian Shell Midden showing Cultural and Economic change*. Unpublished BA(Hons) Thesis, University of Sydney.
- Bradley, W. 1969 [1786-1792]. *A Voyage to New South Wales*. Ure Smith, London.
- Branagan, D. 1997. *Geology & Geography of the Sutherland Shire*. Sutherland Shire Studies Publication No. 3.
- Branagan, D., Herbert, C., & Langford-Smith, T. 1979. *An Outline of the Geology and Geomorphology of the Sydney Basin*. Science Press, Sydney.
- Bronte & Tamarama Advancement Society's Heritage Committee. 1979. Submission to the Heritage Council of NSW.
- Bursill, L. 1993. *Paintings, Engravings, Drawings and Stencils (P.E.D.S) of Southern Sydney Aborigines*. Thesis submitted as part of the requirements for the master of Letters Degree, Department of Archaeology & Paleoanthropology, University of New England, Armidale. Copy held by the Sutherland Library – Local History Collection.
- Butler, K., Cameron, K. & Percival, B. 1995. *The Myth of Terra Nullius: Invasion and Resistance -The Early Years*. Board of Studies (NSW), North Sydney.
- Byrne, D. & Nugent, M. 2004. *Mapping Attachment: A Spatial Approach to Aboriginal Post-contact Heritage*. DEC NSW, Hurstville.
- Byrne, D., Brayshaw, H. & Ireland, T. 2001. *Social Significance: A Discussion Paper*. NSW National Parks & Wildlife Service, Research Unit, Cultural heritage Division, Hurstville.
- Campbell, W. 1898. *Aboriginal Carvings of Port Jackson & Broken Bay* (Memoirs of the Geological Survey of NSW, Ethnological Series, No.1) NSW Department of Mines & Agriculture.

Capell, A. 1970. 'Aboriginal languages in the South Central Coast, New South Wales: Fresh discoveries.' *Oceania* 41:20-27.

Carleton, F. (n.d.). 'One (or two) French Priests & the Catholics of NSW in 1788' in ANZTLA Newsletter 19: 29 - 35.

Carleton, F. 1993. 'An 18th century Conventional Franciscan naturalist on the La Perouse Expedition: Pere Laurent Receveur (1757 - 1788)' in *The Great Circle* (Journal of the Australian Association for Maritime History), 15(1).

Chapman, G & Murphy, C. 1989. Soil Landscapes of the Sydney 1: 100 000 Sheet. Soil Conservation Service of NSW, Sydney.

Clark J, *Lavender and Blue on the North Shore*; The 3 part article first appeared in [Afloat Magazine](#) and was reproduced on <http://www.catharsis.com.au/harboursights/index.html>

Clark, G. 2003. 'Indigenous transfer of La Perouse artefacts in the Southeast Solomon Islands' in *Australian Archaeology* 57: 103 - 111.

Clark, J. 1813. *Field Sports of the Native Inhabitants of New South Wales*. Edward Orme, London (J. Dove)

Clarke, M & Coltheart, L. 1990. *A Heritage of Waste*. Institution of Engineers Australia. Papers of the Fifth National Conference on Engineering Heritage.

Cleary, T. 1993. *Poignant Regalia: 19th Century Aboriginal Breastplates and Images*. Historic Houses Trust of NSW, Sydney.

Clive Lucas Stapleton & Partners. 2004. *Long Bay Correctional Complex: Conservation Management Plan*. Commissioned by the NSW Department of Commerce for the Department of Corrective Services.

Coleman, P. 1986. 'Reminiscences of Old Sydney' in *Descent* (Journal of Australian Genealogists 16(4): 166-172

Collins, D. 1971 [1802]. *An Account of the English Colony in New South Wales*. Volume 2. A.H. & A. W. Reed in association with the Royal Australian Historical Society, Sydney.

Collins, D. 1975 [1798]. *An Account of the English Colony in New South Wales*. Volume 1. A.H. & A. W. Reed in association with the Royal Australian Historical Society, Sydney.

Compagnoni, T. 1949. 'La Perouse - Its link with history' in *Port of Sydney Journal* July 1949: 166 - 169.

Conner, M. 2005. *The Invention of Terra Nullius*. Macleay Press, Sydney.

Context Pty Ltd, July 2008, *La Perouse Headland CMP Community consultation and social values assessment Stage 2*, Draft Report, prepared for NPWS

Cook, J. 1968. *The Voyage of the Endeavour: 1768 – 1771*. Edited by James C Beaglehole, (Sydney).

Cooper, D. 1909. *History of Randwick*. Randwick Municipal Council, Randwick, N.S.W.

Cox, H., Denny, K., Fuller, A., Jacobs, C. & Vale, B. 2001. *The La Perouse Headland Site: A Meeting Place of Three Cultures Conservation Management Plan for Botany Bay National Park*. Faculty of Architecture, University of Sydney Report prepared for NSW NPWS..

Cridland, F. 1950 [1924]. *The Story of Port Hacking, Cronulla and Sutherland Shire*. Angus & Robertson, Sydney.

Curson, P. 1985. *Times of Crisis: Epidemics in Sydney 1788-1900*. Sydney University Press, Sydney.

Dallas, M. & Tuck, D. 2005 *Aboriginal Heritage Assessment Long Bay Correctional Complex*. Report to BBC Consulting Planners Pty Limited on behalf of the NSW Department of Commerce

Dallas, M. & Sullivan, K. M. 1995 *Wollongong City Aboriginal Heritage Planning Study*. Report to Wollongong City Council

Dallas, M. 2004. Draft Facility Management Plan Anzac Rifle Range, Randwick, NSW, Aboriginal Heritage. Report to Coffey Geosciences Pty Limited.

Dallas, M. 2005 Statement of Evidence of Mary Dallas Proceedings 30073 of 2005 in the Land & Environment Court of New South Wales. Prepared for Consolidated Development Pty Ltd

Dallas, M., Steele, D. Barton, H. & Wright, R.V.S. 1997. POW Project 1995. *Randwick Destitute Children's Asylum Cemetery, Archaeological Investigation. Volume 2 Archaeology Part 3 Aboriginal Archaeology*. Report to South Eastern Sydney Area Health Service, Heritage Council of NSW and NSW Department of Health.

Danis, K., Elliott, M., Lee, R., Liu, A., McKenzie, H. & Pechey, B. 2001. *Conservation Management Plan: The Cable Station Building, La Perouse, NSW*. Heritage Conservation - Conservation Methods & Practices. faculty of Architecture, University of Sydney. Report prepared for the NSW National Parks and Wildlife Service.

David, T. & Etheridge, R (Jnr). 1889. 'Report on the discovery of human remains in the sand and pumice bed at Long Bay' in *Records of the Geological Society of NSW* 1(1): 9-15.

Davidson, G., Hurst, J. & Macintyre, S. 2001. *The Oxford Companion to Australian History*. Oxford University Press, Melbourne.

Dawes, William. 1790a. *Grammatical forms of the language of N.S. Wales, in the neighbourhood of Sydney*. MS. 4165(a), Marsden Collection, School of Oriental and African Studies, University of London, London.

Dawes, William. 1790b. *Vocabulary of the language of N.S. Wales in the neighbourhood of Sydney. Native and English*. MS. 4165(b), Marsden Collection, School of Oriental and African Studies, London.

DECC AHIMS and Catalogue of Archaeological Reports.

Dickson, F. c.1975. 'Aboriginal Prehistory of Botany Bay' in Anderson, D (ed.). *The Botany Bay Project: A Handbook of the Botany Bay Region*. The Botany Bay Project Committee, Marrickville. Pp: 44-51.

Dixon, W. 1942. 'A Trip to La Perouse & elsewhere in 1838' (extract from the Voyage of the Venus by A. Du Petit Thouras, Paris, 1841) in *Royal Australian Historical Society Journal & Proceedings* xxx111(11): 119 - 122.

Dowd, B. 1959. *The Centenary of the Municipality of Waverley: 1859-1959*. Published by the Council of the Municipality of Waverley NSW to commemorate its Century of Municipal Government.

Dowling, P. 1998. 'A Great Deal of Sickness: Introduced Diseases Among the Aboriginal People of Colonial South-east Australia'. PhD thesis abstract presented in *Journal & Proceedings of the Royal Society of NSW* 131(1-2): 39-40

DPWS. 1997. *Long Bay Correctional Complex: Conservation Plan*. Commissioned by Department of Public Works & Services for the Department of Corrective Services, prepared by Heritage Group, Dept. of Public Works & Services, Sydney.

Dunmore, J (ed.). 1995. *The Journal of Jean-Francois de Galaup de la Perouse*. The Hakluyt Society, London.

Dunn, B. 1991. *Angling in Australia – Its History & Writings*. David Eli Press Pty Ltd, Sydney.

Duque-Portugal, A. 1992. *Public Interpretations at Botany Bay*. Unpublished thesis (University of Sydney). Available at DEC library, Hurstville.

Dyer, C. 2002. 'The Indigenous Australians in Sydney and its environs as seen by French explorers, 1801 - 1831' in *Journal of the Royal Australian Historical Society* 88(2); 147 - 161.

Edsam. 1938. 'The Story of Bare Island' in *Bank Notes September 1938*: 42 - 44.

Edwards. C & Read, P (eds). 1989. *The Lost Children*. Doubleday, Sydney, 1989.

-
- Emmett, P. 1995. *Fleeting Encounters: Pictures and Chronicles of the First Fleet*. Museum of Sydney, Historic Houses Trust of New South Wales.
- Etheridge, R. & Whitelegge, 1907. 'Aboriginal Workshops on the Coast of NSW and their Contents' in *Records of the Australian Museum, Volume 6*.
- Fitzsimmons, P. 1985. *Eastern Suburbs Album*. Atrand Pty Ltd, Sydney.
- Flannery, T (ed.). 1999. *The Birth of Sydney*. Text Publishing, Melbourne. Australia.
- Fraser, J. 1882. 'The Aborigines of New South Wales' in *Journal & Proceedings of the Royal Society, New South Wales 1882*. Thomas Richards, Sydney.
- Freeman, JW 1968 *Architecture in Australia: A History*, Penguin Books Australia Ltd. Ringwood.
- Friends of Malabar Headland. 2002. *A Proposal for Boora National Park on Malabar Headland: Draft Community Plan of Management*. Prepared by Friends of Malabar Headland.
- Godden Mackay Logan Pty Ltd, 2001. *Prince Henry Site, Little Bay: Archaeological Zoning Plan*. Report prepared for Landcom and the Heritage Council of NSW.
- Godden Mackay Logan, August 2002. *Prince Henry Site, Little Bay. Archaeological Management Plan*. Report prepared for Landcom.
- Godden Mackay Logan, May 2006. *Prince Henry Site at Little Bay. Shell Midden Section 87 Application*. Report prepared for Landcom.
- Godden Mackay Logan, September 2001. *Prince Henry Site, Little Bay. Archaeological Zoning Plan*. Report prepared for Landcom and the Heritage Council of NSW.
- Godden Mackay Pty Ltd, 1992 reprinted 1996, *Fort Scratchley Newcastle, Conservation Plan* prepared for the Commonwealth of Australia
- Godden Mackay Pty Ltd. 1989. *Malabar Headland Draft Plan of Management: Cultural Resources Survey*.
- Godden Mackay Pty. Ltd. 1997. *Anzac Rifle Range Heritage Assessment*.
- Goodall, H. 1996. *Invasion to Embassy: Land in Aboriginal Politics in New South Wales, 1770 1972*. Allen & Unwin in association with Black Books, St Leonards, NSW.
- Grant. E. 1965. *Guide to Fishes*. Department of Harbours & Marine, Queensland.
- Grey J, 2008, *A Military History of Australia*, 3rd Edition, Cambridge University Press, Melbourne
- Haglund, L. 1989. *Assessment of the Prehistoric Heritage of Bare Island and the La Perouse Headland*. Report to NSW NPWS & NSW PWD.

Haglund, L. 2006. Report on test excavation at Cape Banks, La Perouse, within area to be used as a base for the Southern Region Life Saver Rescue Helicopter Service (Report to Landcom).

Haglund, L. 2007. Report on monitoring of the excavation of a service trench (DEC Consent #2586) leading to the newly established base for the Southern Region Life Saver Rescue Helicopter Service (Report to Landcom).

Hall, J. & McNiven, I. 1999. *Australian Coastal Archaeology*. ANU Research Papers, ANU, Canberra.

Hamilton, A. 1918. 'Topographical, ecological and taxonomic notes on the ocean shoreline vegetation of the Port Jackson District' in *Journal & Proceedings of the Royal Society of New South Wales* 51: 287 355.

Hassall, J. 1977 [1902]. *Old Australia, Records and Reminiscences from 1794*. Library of Australian History, North Sydney.

Heiss, A (ed.). 2002. *Life in Cadigal Country*. Cadigal Information Service, Strawberry Hills.

Henry, G. & Lyle, J (eds). 2003. *National Recreational & Indigenous Fishing Survey*. FRDC Project Nos. 99/158. Australian Government Department of Agriculture, Fisheries & Forestry, Canberra.

Higginbotham E 1989 *La Perouse and Bare Island Historic Sites, La Perouse – Conservation Plan – Historical archaeology*, Report prepared for the Department of Public Works, NSW.

Higginbotham, E. 1993. *Waverley Heritage Study*. Volume 4: Historical Archaeology Report. Report prepared for Perumal Murphy Wu Pty Ltd and the Waverley Council.

Hill, R. & Thornton, G. 1892. *Notes on the Aborigines of New South Wales (With personal reminiscences of the tribes formerly living in the neighbourhood of Sydney and the surrounding districts)*. Published by the Authority of the NSW Commissioners for the World's Columbian Exposition, Chicago, 1893.

Hinkson, M. 2001. *Aboriginal Sydney: A Guide to Important Places of the Past and Present*. Aboriginal Studies Press, Canberra.

Historical Records of Australia [HRA]. Series 1, Library of the Commonwealth Parliament, Canberra.

Horton, D (ed.). 1994. *Encyclopaedia of Aboriginal Australia. Volumes I & II*. Aboriginal Studies Press for AIATSIS.

Howitt, R. 1845. *Impressions of Australia Felix*. Longman, Brown, Green, and Longmans, London.

<http://www.lib.mq.edu.au/all/journeys/related/fortmacquarie.html>

Hunter, J. 1968 [1793]. *An Historical Journal of Transactions at Port Jackson & Norfolk Island including the Journals of Governors Phillip and King, and of Lieutenant Ball*. Australiana Facsimile Edition, Libraries Board of South Australia.

Hutton-Neve, M. 1983. 'A Port Hacking Tragedy' in *Sutherland Shire Historical Society Quarterly Bulletin* 43, February 1983. Pp:12-13.

Hutton-Neve, M. 1992a. 'European verses Aboriginal Settlement and its effect on the Shire' in *Sutherland Shire Historical Society Quarterly Bulletin* 39, February 1982. Pp:18-19.

Hutton-Neve. 1982b. 'The Census & Aborigines: The Tragedy of the Botany Bay Clan' in *Sutherland Shire Historical Society Quarterly Bulletin* 41, 1982. P:62.

Index of the Criminal Trial reports No. 2 – names of persons tried before the Supreme Court and Quarter Sessions 1839-1840. First published 28 July 1989, Popinjay Publications. ML Ref 1 Q346.6/7/Set.

Jervis, J. 1945. 'Further notes on the La Perouse tower at' in *Royal Australian Historical Society Journal & Proceedings* xxxiii (ii): 110 - 115.

Jervis, J. 1945. 'The stone tower at La Perouse' in *Royal Australian Historical Society Journal & Proceedings* xxxi (iv): 281 - 283.

Kass T, 1989. *The Bare Island & La Perouse Monuments Historic Sites, La Perouse: An Historical Investigation. Draft Final Report*, Report prepared for the NSW National Parks and Wildlife Service.

Kass T, 1995. *Long Bay Complex 1896 -1994: A History*. Final report prepared by Terry Kass for NSW Public Works. ML SLNSW ML Q994.4006/20.

Kelly, M (ed.). 1987. *Sydney: City of Suburbs*. Kensington.

Kelly, M (ed.) 1978. *Nineteenth-Century Sydney: Essays in Urban History*. Sydney University Press, Sydney.

King, P. 1790. *Journal, 1786-1790*. ML SLNSW ML [MSS C115].

King, R. 1999. 'What brought the French to Botany Bay' in *JRAHS* 85(2): 140 - 170.

Kitson M, 2001, An Attack on Melbourne: a case study of the defence of Australia's major ports in the early 1890s [Article reproduced on the web with permission from the *Journal of the Australian War Memorial* No.35, December 2001.]

Kohen, J. & Lampert, R. 1987. 'Hunters and Fishers in the Sydney Region' in Mulvaney, J. & White, J (eds). 1988. *Australians to 1788*. Fairfax, Syme & Weldon, Sydney.

-
- Kohen, J. 1985. *Aborigines in the West: Prehistory to Present*. Western Sydney Project, Armidale.
- Kohen, J. 1993. *The Darug and their Neighbours: The Traditional Owners of the Sydney Region*. Darug Link in association with the Blacktown and District Historical Society.
- Kohen, J. 1995. *Aboriginal Environmental Impacts*. University of New South Wales Press.
- Kohen, J.L. et al. 1984. Shaws Creek KII rockshelter: A prehistoric occupation site in the Blue Mountains piedmont, eastern New South Wales. **Archaeology in Oceania**. 19:57-93.
- La Perouse Headland Conservation Plan*. 1992. Report prepared for the NSW NPWS.
- La Perouse Monument Trust Meeting Minutes (195? - 1972), held by NSW National Parks and Wildlife Service.
- Labilliere, Vol 2 *Early History of the Colony of Victoria*, published 1878 by Sampson Con, Marston, Searle & Rivington, Crows Building 188 Fleet St, London.
- Lambert, D. & Biddle, R. 2001 *La Perouse Whale Engraving*. Report to NSW NPWS
- Lampert, R. & Megaw, V. 1979. 'Life around Sydney' in Stanbury, P (ed.). 1979. *10,000 Years of Sydney Life: A Guide to Archaeological Discovery*. The Macleay Museum, University of Sydney.
- Lampert, R. 1971 Burrill Lake and Currarong. Coastal Sites in Southern NSW. *Archaeology and Physical Anthropology in Oceania* 9: 226-235
- Laracy, H. 1980. 'Leopold Verguet and the Aborigines of Sydney, 1845' in *Aboriginal History* 4(2): 178 - 183.
- Larcombe, F. 1963. *The History of Botany: 1788-1963*. The Council of the Municipality of Botany.
- Lawrence, J. 1998. *A Pictorial History of Sutherland Shire*. Kingsclear Books, Alexandria.
- Lawrence, J. 2001. *Pictorial History of Randwick*. Kingsclear Books, Alexandria.
- Leeson, G. 1987. *Just a Dump?: An Evaluation of the Environmental, Cultural and Recreational Resources of the Botany Bay National Park*. Landscape Architecture Thesis, Canberra College of Advanced Education.
- Leonard, M. 1987. *Recollections of Long Bay*. Randwick and District Historical Society. ML SLNSW ML Q994.41/149
- Lewis, G. 2006. *La Perouse: Why He came to the Pacific*. Randwick & District Historical Society Publication.

-
- Lowe, G. 1842-1850. *Album of Works: 1842-1850*. SLNSW ML C390.
- Lynch, W. & Larcombe, F. 1976. *Randwick 1859-1976*. W.B. Oswald Ziegler Publications for the Council of the Municipality of Randwick, Sydney.
- Manidis Roberts Consultants. 1990. *Malabar Headland: Draft Plan of Management*. Report prepared by Manidis Roberts Consultants. Randwick Municipal Council.
- Marriott E, 1988. *The Memoirs of Obed West: A Portrait of Early Sydney*. Barcom Press, Bowral.
- Martin RM, in *History of the Colonies of the British Empire*, 1843
- Mary Dallas Consulting Archaeologists & Groundtruth Consulting. 2001. *Aboriginal Archaeological Assessment of Lot 8 Captain Cook Drive, Kurnell*. Prepared for R.W. Corkery & Co. Pty Ltd on behalf of Rocla Ltd.
- Mary Dallas Consulting Archaeologists, 2002, *Aboriginal Archaeological Assessment of Lot 8 DP586986, Captain Cook Drive, Kumell*. Prepared for R.W. Corkery & Co. Pty Ltd. on behalf of Rocla Ltd.
- Mary Dallas Consulting Archaeologists, 2003, *Aboriginal Archaeological Assessment of Lot 8 DP586986, Captain Cook Drive, Kumell*. Prepared for R.W. Corkery & Co. Pty Ltd. on behalf of Rocla Ltd.
- Mason W, 1857, *The Australian Picture Book*, published by J R Clarke, Sydney.
- Matthews R H, 1896 in *Journal of the Anthropological Institute* Vol 25 :147, 150
- Matthews R, 1900, 'Organisation, Language and Initiation Ceremonies of the Aborigines of the South East Coast of N.S.W' in *Journal of the Royal Society of New South Wales*. 34:262-281.
- Matthews R, 1903, 'The Dharruk Language' in *Journal & Proceedings of the Royal Society of New South Wales*. 35:155-160.
- Matthews R, 1904, 'Ethnological Notes on the Aboriginal Tribes of N.S.W and Victoria' in *Journal of the Royal Society of New South Wales*. 35: 127-160.
- Matthews RH, 1895, in *Proceedings of the Australian Association for the Advancement of Science* Vol V1, p637, Plate 90, f.30 as cited in Campbell 1889.
- McBean & Crisp Pty Ltd. 1989, *Structural Condition & Cultural Significance of the Bare Island & La Perouse Monuments & Historic Sites*. Report to the NSW PWD & NSW NPWS.
- McCarthy FD, 1948, "*The Lapstone Creek excavation: Two culture periods revealed in eastern New South Wales*", *Records of the Australian Museum* 22(1):1- 34.
- McCarthy FD, 1983, *Catalogue of the Rock of the Sydney - Hawkesbury District NSW*. 2

Vols. NPWS.

McCormick T, 1987, *First Views of Australia 1788-1825: A History of Early Sydney*. David Ell Press/Longueville Publications, Chippendale.

McDonald J, 1985, *Sydney Basin Aboriginal Heritage Study. Stage 1: Rock Engravings & Shelter Art Sites*. Report to NSW NPWS.

McDonald J, 1987, *Sydney Basin Aboriginal Heritage Study. Stage 2: Shelter Art Sites*. Report to NSW NPWS.

McDonald J, Mitchell P & Rich E, 1996, A further investigation of site RS1 (45-5-892) at Regentville, Mulgoa Creek, Western Sydney. Report to Pacific Power, Sydney.

McDonald J, Rich E & Barton H, 1994. The Rouse Hill Infrastructure Project (Stage 1) on the Cumberland Plain, Western Sydney. Archaeology in the North. Proceedings of the 1993 Australian Archaeological Association Conference:259-293.

McGinley D, 1983, 'An Aboriginal Tragedy at Port Hacking' in *Sutherland Shire Historical Society Quarterly Bulletin 44*, November 1983. Pp:41-42.

McGuanne J, 1910, 'Old Sydney Blackfellow' in *The Public Service Journal*, 1 February 1910 - presented in McGuanne's Press Contributions (ML SLNSW ML Q911m).

McGuigan A, c.1985 *Aboriginal Reserves in NSW: A Land Rights Aid*. Occasional Paper No. 4. NSW Ministry for Aboriginal Affairs.

McIntosh L, Perry G, Fraser B & Linnell A, 1980, *Malabar: A Regional Study*.

McIntyre S, Feb 1985, A Report on Protection Works Carried Out by the Randwick Municipal Council on an Eroded Campsite/Midden at La Perouse. Report to the Randwick Municipal Council.

McKenzie P & Stephen A, 1987, 'La Perouse: An Urban Aboriginal Community' in Kelly, M. (ed). 1987. *Sydney: City of Suburbs*. Kensington.

Meadows E, 1999, *Aboriginal History of the Waverley Area: A Discussion Paper*. Reference Department, Waverley Library.

Megaw J, 1969a, 'Captain Cook and the Australian Aborigine' in *Australian Natural History* December, 1969.

Megaw J, 1969b, 'Captain Cook and Bone Barbs at Botany Bay' in *Antiquity* XLIII: 213 – 216.

Megaw J, 1994. 'There's a Hole in my Shield: A Textual Footnote' in *Australian Archaeology* 38: 3537.

Megaw JVS, (ed.) 1974a. *The Recent Archaeology of the Sydney District: Excavations 1940-1967*. Australian Institute of Aboriginal Studies, Canberra.

Megaw JVS, 1967. 'Radiocarbon dates from Curracurrang Cove, NSW', *Australian Institute of Aboriginal Studies Newsletter* 2(5):26-30.

Megaw JVS, 1968. 'Trial Excavations in Captain Cook's Landing Place Reserve, Kurnell, NSW' in *Australian Institute of Aboriginal Studies Newsletter* 2(9): 17-20.

Megaw JVS, 1974b. "The Recent Archaeology of the South Sydney District: A Summary" in Megaw JVS, (ed.) *The Recent Archaeology of the Sydney District Excavations 1964-1967* Australian Institute of Aboriginal Studies, Canberra. Pp:35-40.

Miller M, 1992 *Gentlemen of the Cable Service; A pictorial History of Australia's Overseas Communications Service 1870-1934*.

Mission Publications of Australia. 1968. *A Century of Integrated Schooling: A Brief Historical Account of La Perouse School from its foundations in 1868 to 1940*. Prepared from records held in the Department of Education & State Archives, La Perouse.

Montgomery J, (ed.). 1831. *Journal of Voyages and Travels by the Rev Daniel Tyerman and George Bennett, Esq.* Deputed from the London Missionary Society. Westley and Davis, London.

Moore P, 1989, *Native Plants of the Sydney District: An Identification Guide*. Kangaroo Press in Association with the Society for Growing Plants, Sydney.

Morris B, 1978, *Colonial Occupation of NSW: The Aboriginal Experience*. BA Honours Thesis, Macquarie University.

Morrison W, 1888, *Aldine Centennial History of New South Wales*. Volume 1. Aldine Publishing, Sydney.

Mudie R, 1829, *The Picture of Australia, 1829*. Whittaker, Treacher & Co, London

Mulholland G, 1988. *The Heritage of Botany*. Council of the Municipality of Botany.

Mulvaney D & White J, (eds). 1987. *Australians to 1788*. Fairfax, Syme & Weldon, Sydney.

Mulvaney J & Kamminga J, 1999. *Prehistory of Australia*. Allen & Unwin, Sydney.

Mundy C, 1971 [1855]. *Sydney Town: 1846-1851*. Review Publications, Dubbo.

Myers F, 1885, *Botany Bay: Past and Present*. SLNSW ML 981.1/21A1.

N.S.W. Public Works Department Architectural Division (NSW PWDAD) 1987, *The Cable Station La Perouse Conservation Plan*, Report prepared for the NSW National Parks and Wildlife Service.

Neilson K, & Kennedy G, Ed., 1997, *Far Flung Lines: Essays on Imperial Defence in Honour of Donald McKenzie*, Routledge, Taylor & Francis Guys.

Newbery P, 1999, *Aboriginal Heroes of the Resistance: From Pemulwey to Mabo. Action for World Development*, Surry Hills.

NPWS Cultural Heritage Services Division, May 1997, *Bare Island Conservation Plan, Final Report*.

NSW Department of Environment & Conservation (DEC), 2005, *Comprehensive Coastal Assessment: Aboriginal Cultural Heritage Audit*. A report prepared for the Coastal, Rural & Regional Strategy Division of DIPNR.

NSW Department of Mineral Resources, 2000, *Mining by Aborigines – Australia's First Miners*. Minefact No. 84. St. Leonards.

NSW Heritage Office, 1996, *Heritage Terms & Abbreviations*. Publication prepared by the Heritage Office (NSW), Department of Urban Affairs & Planning.

NSW Heritage Office, 2001, *Assessing Heritage Significance*. A NSW Heritage Manual Update. Published by the NSW Heritage Office.

NSW Heritage Office, 2004, *Revealing the Past: An Introduction to Historical Archaeology*.

NSW Legislative Assembly, 1862, Blankets for the Aborigines (from the Government Stores) 1857-1861: Returns relative to the distribution of). Ordered to be printed 3 June, 1862. SLNSW ML ML Q 572.9901/N

NSW National Parks and Wildlife Service (NPWS), (n.d.), *La Perouse Museum. Museum Guide* prepared by NSW NPWS.

NSW National Parks and Wildlife Service (NPWS), 1975, *Bare Island Historic Site: Plan of Management*.

NSW National Parks and Wildlife Service (NPWS), 1992, *La Perouse Headland Conservation Plan. Report prepared by NSW NPWS*.

NSW National Parks and Wildlife Service (NPWS), 1993, *La Perouse Headland Conservation Plan*. Report prepared by NSW NPWS.

NSW National Parks and Wildlife Service (NPWS), 1997a. *Draft Aboriginal Cultural Heritage Standards & Guidelines Kit*.

NSW National Parks and Wildlife Service (NPWS), 1997b. *Bare Island Conservation Plan. Volume 1: Conservation Plan*. Report prepared by the NSW NPWS Cultural Heritage Services Division.

NSW National Parks and Wildlife Service (NPWS), 1997c. *Bare Island Conservation Plan. Volume 2: Appendices & Illustrations*. Report prepared by the NSW NPWS Cultural Heritage Services Division.

NSW Public Works Department (PWD), 1987 *Conservation Plan: The Cable Station La Perouse*. Report prepared for the NSW NPWS by the NSW PWD (Architectural Division).

NSW Public Works Department (PWD), 1990, *Landscape Analysis for the La Perouse Headland & Bare island Historic Site*. Report prepared by the NSW PWD (Environmental Design Section).

NSW Royal Commission on Defence Works, 1890, *Report of the Royal Commission on Defence Works, appointed July 14 1890*. G.S. Chapman, Acting Govt. Printer, Sydney [Report 91 facsimilie copy held by NSW DEC].

Nugent M, 2005, *Botany Bay: Where Histories Meet*. Allen & Unwin, Sydney.

O'Brien L, 1986, *Phillip's Landing – Yarra Bay Bi-centennial Project: Heritage Study Report*. Report prepared by O'Brien Heritage Consultants for Land Systems Pty Ltd and Randwick Municipal Council.

O'Brien T, nd. 'Reminiscences of Bondi' presented in *Royal Australian Historical Society Journal* 1922-23, Volume VIII: 362 – 365.

Office of the Board of Studies (NSW), 1995, *Talking Lapa: A local Aboriginal community history of La Perouse*. Office of the Board of Studies (NSW), North Sydney.

Oppenheim, P. 2004, *The Fragile Forts, The Fixed Defences of Sydney Harbour 1788-1963*, Army History Unit, Department of Defence, Canberra ACT.

Organ M, (n.d.), *Black Angel*. MI Mss 5100 [Cy reel 3382].

Organ M, 1990, *A Documentary History of the Illawarra & South Coast Aborigines 1770-1850* (including a chronological bibliography 1770-1990). Aboriginal Education Unit, Wollongong University, Wollongong.

Organ M, 1993, *Illawarra and South Coast aborigines, 1770-1900*. Self published, Wollongong.

Pollen F, 1988, *The Book of Sydney Suburbs*. Angus & Robertson Publishers, Sydney.

Proto A, 2000, *The Road to Botany Bay : the Story of Frenchmans Road Randwick Through the Journals of Lapérouse and the First Fleet Writers*. Compiled and introduced by Alec Protos, Randwick & District Historical Society.

Pugshell, 1924a. *Early Days of Waverley*. Collection of Newspaper clippings from the Eastern Suburbs Daily & The Bondi Daily. SLNSW ML ML Q991.1/P.

Pugshell, 1924b. 'Aboriginal Workshop at Bondi: Tomohawks, Grindstones, Nose Ornaments, etc' in *Eastern Suburbs Daily*, September 12, 1924.

Radford R & Hylton J, 1995. *Australian Colonial Art 1800-1900*. Art Gallery of South Australia, Adelaide.

Ramsland J, 1996, *With Just But Relentless Discipline: A Social History of Corrective Services in NSW*. Kangaroo Press, Kenthurst.

Randwick City Council, 2003, *State of the Environment Report 2003*.

Randwick Municipal Council, 1985, *Randwick: A Social History*. NSW University Press, Kensington.

Reece R, 1967, 'Feast & Blankets: The History of Some Early Attempts to Establish Relations with the Aborigines of New South Wales, 1814-1846' in *Archaeology & Physical Anthropology in Oceania* 2(3): 190-206.

Reece R, 1974, *Aborigines & Settlers*. Sydney University Press.

Robinson L, 1998, 'Aboriginal Uses of Plants Around Sydney' in *Australian Plants Online No. 10* (June 1988).

Rosenman H, 2001, Commodore Jean-Francois de Galup Comte de La Perouse. *The Naval Historical Society of Australia Inc. Monograph 174*.

Rosenman S, 1992, *Two voyages to the south seas : Australia, New Zealand, Oceania 1826-1829, Straits of Magellan, Chile, Oceania, New Guinea, Australia, South East Asia, Tasmania, Antarctica, New Zealand, Torres Strait 1837-1840 in the corvettes Astrolabe 1826-1829, Astrolabe and Zélée 1837-1840*. Jules S.-C. Dumont D'Urville - translated from the French and retold by Helen Rosenman. Melbourne University Press, Melbourne.

Ross A, 1976, *Intertribal Contacts: What the First Fleet Saw*. Submitted as part of the requirement for the degree of B.A. Honours, Department of Anthropology, Sydney University.

Ross A, 1988, 'Tribal and Linguistic Boundaries: A Reassessment of the Evidence' in Aplin, G (ed.). 1988. *Sydney Before Macquarie: A Difficult Infant*. New South Wales University Press, Sydney.: 42-53.

Roughley T, 1966, *Fish & Fisheries of Australia*. Angus & Robertson, Sydney. Chapter on Aboriginal Fishing revised by Prof. A. P. Elkin (1st edition 1951).

-
- Roy P & Crawford E, 1979, *Holocene Geological Evolution of the Southern Botany Bay – Kurnell Region, Central New South Wales Coast*. Reprinted from the Dept. of Mineral Resources, Records of the Geological Survey of New South Wales 20(2): 159-250.
- Salt D, 2000, Kurnell: *Birthplace of Modern Australia*. Clarion House, Como West.
- Samuel E, 1938, 'Bare Island: An Early Australian Fort' in *Walkabout* 1 June 1838: 19 - 20.
- Scott B R, 1994, *Gentlemen on Imperial Service; A Story of the Trans-Pacific Telegraph Cable, Told in the Words of Those who Served*, Sono Nis Press, Victoria.
- Scott E, 2005, *Terre Napoleon: A history of French Explorations and Projects in Australia*. A Project Gutenberg EBook.
- Scratchley, Sir Peter Henry, 1835-1885, Biographical Entry, *Australian Dictionary of Biography Online* <http://www.adb.online.anu.edu.au/biogs/A060113b.htm>
- Selkirk H, 1918, 'La Perouse and the French monuments at Botany Bay' in *Royal Australian Historical Society Journal & Proceedings iv(vii)*: 329 - 359.
- Sharp A, 2000, *Pictorial History – City of Sydney*. Kingsclear Books, Sydney
- Smith K, 2001, *Bennelong: The Coming in of the Eora, Sydney Cove, 1788 1792*. Kangaroo Press, Kenthurst.
- Smith K, 2002, *Eora & Cameragal: The Sydney Coastal Clans – A Cultural profile*.
- Smith K, 2006, 'Highways in the Stream' at *Mitchell* 2(2): 3 - 5.
- Stanbury M & Green J (eds). 2004, Lapérouse and the Loss of the Astrolabe and the Boussole (1788): Reports of the 1986 and 1990 Investigations of the Shipwrecks at Vanikoro, Solomon Islands. *AIMA Special Publication No. 11*.
- Stanbury P (ed.). 1979, *10,000 Years of Sydney Life: A Guide to Archaeological Discovery*. The Macleay Museum, The University of Sydney.
- Starling S, 2002, *The Fisherman's Handbook*. Sandstone Publishing, Sydney.
- State Library of NSW (SLNSW), 2005, *Any News of La Perouse?* Catalogue produced by the SLNSW, Sydney.
- Stockdale J, 1950 [1789]. *The Voyage of Governor Philip to Botany Bay*. Facsimile edition – Australiana Society, Adelaide.
- Stockton ED & Holland WN, 1974, Cultural sites and their environment in the Blue Mountains. *Archaeology and Physical Anthropology in Oceania*. 9:36-64.

Sue Rosen & Associates. 1998. *Heritage Assessment – Tea Gardens Hotel, Bondi Junction*. Report prepared for Rosemary Kerr, Sue Rosen & David Sheedy.

Sydney Publishing Pty Ltd, 2003. *Greater Sydney & Blue Mountains Street Directory* (8th edition). Sydney Publishing Pty Ltd, Sydney.

Tench W, 1979 [1789-1793], *Sydney's First Four Years*. Library of Australian History, Sydney.

Tennison-Woods J, 1882, *Fish & Fisheries in New South Wales*.

Thompson G, 1787, *Copious remarks on the discovery of New South Wales: with a circumstantial description of Botany Bay and the islands, bays, harbours, &c. lying near it. With enlarged observations on the natural productions, and face of the country. To which are added, prefatory observations on transportation ; A sketch of the equipment, designed for the conveyance of the convicts, and the number of criminals intended to be put on board each vessel*. Printed for the booksellers in Town and Country, London. SLNSW Dixon Reading Room 78/16.

Thornton G, 1899, 'Aboriginal Names of Places at Port Jackson and along the Coast'. *Science*, 31 December 1899.

Tindale N, 1974, *Aboriginal Tribes of Australia*. ANU, Canberra.

Troy J, 1994, *The Sydney Language*. Produced with the assistance of the Australian Dictionaries Project and the Australian Institute of Aboriginal and Torres Strait Islanders.

Tuck D, 2006, *La Perouse Headland, Botany Bay National Park: A Shared History – Final Report*, Report prepared for the NSW Department of Environment and Conservation (Parks & Wildlife Division, Harbour South Area).

Turbet P, 2001a. *The Aborigines of the Sydney District before 1788*. Kangaroo Press (Simon & Schuster), Sydney.

Turbet P, 2001b. 'Seafoods of the Dharawal' in *Sutherland Shire Historical Society Bulletin* 4(1): 29-32.

Turner J, 1980, Manufacturing in Newcastle: 1801-1900. *Newcastle History Monograph No. 8*, Newcastle Public Library.

Vaughn H, 1992, *The Australian Fisherman's Companion*. Ure Smith Press, Sydney.

Wait E, 1952a. 'Dark People: Aborigines in Sydney (1)' in *The Australian Highway* August 1952: 39 - 41.

Wait E, 1952b. 'The Dark People (11): The reasons for coming to the city' in *The Australian Highway* November 1952: 56 - 58.

Walden I, 1995, 'To Send Her to Service': Aboriginal Domestic Servants' in *Indigenous Law Bulletin Online* 3(76), October 1995.

Waterman J, (undated essay) 'Recollections of Sydney' presented in *Royal Australian Historical Society Journal* 1922-23, Volume VIII: 359-362.

Waugh J (ed.), 2001, *Aboriginal People of the Eastern Coast of Sydney: Source Documents*. Randwick & District Historical Society.

Wells W, 1970 [1848], *Dictionary of the Australian Colonies - 1848*. Council of the Library of New South Wales, Sydney.

Welsby T, 1909, *Schappering and Fishing in the Brisbane River and Moreton Bay Waters*. Outridge Printing Company, Brisbane.

West A, 1812, *Views of New South Wales* (ML F 981w)

West O, 1882, *Old & New Sydney*. Reprinted from the Sydney Morning Herald with permission from the proprietors, Edward Horden & Sons. SLNSW ML.

West O, 1988. *The Memoirs of Obed West: A Portrait of Early Sydney*. Barcom Press, Sydney.

WFD, Jervis (Major General Sir) – Governor of South Australia, 1880, in a Lecture titled *Defences of Great Britain & Her Dependencies*, Pamphlet No.6, E Spiller, Government Printer, North Terrace, Adelaide bound in a Volume titled Pamphlet No.1. (ML DSM/042/P514)

Wheeler J, 1962, 'Old Miller's Point' in *Royal Australian Historical Society Journal* 48(4): 301-320.

Whitaker A-M, 2002, *Pictorial History of South Sydney*. Kingsclear Books, Sydney.

White J, 1962 [1790], *Journal of a Voyage to New South Wales*. Angus & Robertson in association with the Royal Australian Historical Society, Sydney.

Willey K, 1979, *When the Sky Fell Down: The Destruction of the Aboriginal Tribes of the Sydney Region, 1788 -1850*. Sydney.

Williams P, 1986, 'Reminiscences of Old Sydney' in *Descent* 16(4):166-172.

Willmot E, 1987, *Pemulwuy: Rainbow Warrior*. Weldons, Sydney.

Woolmington J (ed.), 1973, *Aborigines in Colonial Society: 1788-1850*. Cassell Australia, Melbourne.

Worgan G, 1978 [1788]. *Journal of a First Fleet Surgeon*. Library Council of New South Wales, Sydney.

www.en.wikipedia.org/wiki/Martello_tower

www.environment.nsw.gov.au/nswcultyreheritage/Sydney defence heritage.htm

Yeates, N. 1993. *Coffs Harbour. Volume 1: Pre 1880 – 1945*. Banana Coast

11.2 1820s Sources referred to in Section 5.0

(Courtesy Professor Ivan Barko and Doug Morrison referred to in Section 5.1 Occupation Evidence)

Hyacinthe de Bougainville, *Journal de la navigation autour du globe de la fregate la Thétis et la corvette l'Esperance pendant les années 1824, 1825 et 1826: publié par ordre du roi, sous les auspices du Departement de la Marine*, Paris, Arthus Bertrand, 1837, Vol. I, :527. Translation by Henry Selkirk, see 'La Perouse and the French Monuments in Botany Bay', *The Royal Australian Historical Society – Journal and Proceedings*, Vol. IV, 1918, Vol IV, Part VII, :349-50

Hyacinthe de Bougainville, "Notes personnelles. Notes détachées sur Port Jackson" in Bougainville, Archives personnelles déposées aux Archives Nationales, Paris 155AP12, piece 45:29-31. Translation by Ivan Barko from a photocopy of the manuscript, provided by Professor Serge Rivière.

François Bellec, *Les Esprits de Vanikoro. Le mystère Lapérouse*, Paris, Gallimard, 2006, p38. The primary source is Hyacinthe de Bougainville's report to the Secretary of State for the Navy and the Colonies, André-Jean comte de Chabrol de Crouzol, 31 January 1826, Archives Nationales, Paris, fonds Marine 5 JJ 88, n°11.

Philip Gidley King, Private journal, SLNSW Heritage Collection, Mitchell and Dixon Libraries, Microfilm CY 298 frames 1-236.

Letter to Fleurieu, Botany Bay, 7 February 1788. See M.L.A. Millet-Mureau (ed.) *Voyage de la Pérouse autour du monde publié conformément au décret du 22 avril 1791*, Paris, 1798, vol.4, pp. 266-267.

René Primevère Lesson, *Voyage autour du monde: entrepris par ordre du gouvernement sur corvette La Coquille*, Paris, P. Pourrat Frères, 1838-39. Translation by Henry Selkirk, see 'La Perouse and the French Monuments at Botany Bay', *The Royal Australian Historical Society – Journal and Proceedings*, Vol. IV, 1918, Vol. VI, Part VII, p. 349-350.

Victor Lottin, quoted in François Bellec, *Les Esprits de Vanikoro. Le Mystère Lapérouse*, Paris, Gallimard, 2006, pp. 37-38.

**APPENDIX A - People who attended meetings & were consulted during
the preparation of the *La Perouse Headland Conservation Management Plan***

See also Section 1.9 Acknowledgements

Workshop Attendees

Workshop 1 – Friday 11 May 2007

Sean Delsignore
Joel Kelly
Wayne Simms
Darren Cooley
Lindsay Holten
Natalie Timbery
Joanne Timbery
Dean Kelly - NPWS
Leslie McLeod
Ray Ingrey
Chris Ingrey
Adrian Hansen
Yvonne Simms
Barbara Keeley Simms
Norma Simms
Lionel Sarich
Athol Dixon
Robert Cooley - NPWS
Maxine Ryan
Kaiya Donovan - NPWS
Thea Eikemo – NPWS
Dave Costello – NPWS
Sandy Blair – Context Consultant
Chris Johnston – Context Consultant

Workshop 2 – Saturday 12 May 2007

Charles Abela
David Haugh
Gail Tring
Glen Blaxland
Lynda Newman
Lucy Porter
Lily Bond
Doug Smith
Greg Bond
Michael Daly
Elizabeth Broomhead – NPWS
Dean Kelly - NPWS
Kaiya Donovan - NPWS
Dave Costello – NPWS
Sandy Blair – Context Consultant
Chris Johnston – Context Consultant

Workshop 3 – March 6 2008

Sean Delsignore
Wayne Simms
Lindsay Holten

Natalie Timbery
Joanne Timbery
Adam Russell
Adam Mason
Jeynara Murray
Leslie McLeod
Darren Cooley
Dean Kelly
Raymond Ingrey
Chris Ingrey
Adrian Hansen
Yvonne Simms
Norma Simms
Lionel Sarich
Rob Cooley
Thea Eikemo
Kaiya Donovan
Cath Snelgrove
Athol Dixon

Workshop 4 - March 5 2008

Consul Général - Lionel
M. Théodore ARFARAS, President of War Veterans
Mme Carole ROUSSEL, Member of the Friends
M. Francis CAPPE, Principle of the French School
M. Bernard ELATRI, President of the French paper circulated in Australia
M. Jean-Jacques GARNIER, Cultural Events Manager, French Embassy Canberra
M. Thibaut d'ARGOEUVES, Publicity Officer
Mme Merlyn GORANA, Worked in the Consuls Office for 26 years.
David Costello – NPWS
Kaiya Donovan – NPWS
Catherine Snelgrove – NPWS
Elizabeth Broomhead – NPWS
Sandy Blair – Consultant Context
Chris Johnston – Consultant Context

Workshop 5 – May 8 2008

Glen Blaxland
Barbara Keeley Simms
Bob Brooks
M. Lionel Majests – Larrouy
Lily Bond
Alain Psyche
Joanne Timbery
Carol Abela
Athol Dixon
Peter Orlicvijh
Doug Smith
Ivan Barko
Barbara Barko
Kathleen Curnow
Natalie Timbery
Doug Morris
John Burgess
Elizabeth Finnot

Ken Fin
Gail Cooke
Amelie Le Comte
Greg Bond
John Cann
Stan Konstantaras
Merlyn Gorana
Mary Page
Dean Kelly
Veronique Gin
Charles Abela
Yvonne Simms
Bernard Elatri
Gary Peters
Louise Minutillo
Aunty Jean Stewert
Robert Belleli
Gary Dunnett – NPWS
David Costello – NPWS
Kaiya Donovan - NPWS
Elizabeth Broomhead – NPWS
Nicole Ribera – NPWS
Ben Khan – NPWS
Mary Dallas – Consultant
Jill Sheppard – Consultant
Chris Johnston – Consultant
Sandy Blair – Consultant

