










La PEROUSE HEADLAND

Botany Bay National Park

CONSERVATION MANAGEMENT PLAN

STAGE 1 – Significance Assessment

May 2007

prepared by Jill Sheppard Heritage Consultants

for the NSW Department of Environment & Climate Change

Parks & Wildlife Division



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See also *LA PEROUSE HEADLAND – A SHARED HISTORY* prepared by Dan Tuck 2006 which is a companion volume referred to in this Report.

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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[1] Specific Information regarding Aboriginal Archaeology has been omitted from this Draft Plan to respect possible concerns of the local community. If you would like further information regarding this matter please contact the Harbour South Area Office on 02 9337 5511.

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01 Watchtower

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07 Pere Le Receveur's Tomb

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Executive Summary

This report is the first stage in the preparation of a Conservation Management Plan (CMP) for the La Perouse Headland, within Botany Bay National Park. It presents the significance assessment findings to date, which will be augmented by the findings of the later stages of the preparation of the CMP.

This report builds on numerous previous studies of the headland including the *La Perouse Headland – A Shared History* (2006) prepared by Dan Tuck, which is a companion volume to this report. This report also includes preliminary consideration of the findings of the Draft *Social Values Assessment of the La Perouse Headland* prepared as a separate study by Context.

Stage 1 of the CMP preparation is limited in scope to the consideration of the significance values of:

- The Macquarie Watchtower
- The Cable Station (containing the La Perouse Museum)
- The La Perouse Monument,
- The Pere Receveur Tomb, and
- Associated Aboriginal and Archaeological sites.

The following Summary Statement of Significance is an interim finding. It will be revised to include an assessment of the significance value of Bare Island and a more detailed assessment of the French attachment to the Headland.

Interim Summary Statement of Significance for the La Perouse Headland

The La Perouse headland precinct is a place of State and national significance value. 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 association between Aboriginal people and the La Perouse headland is of State significance value. It is potentially of national significance value as the site of Aboriginal community survival and protest. However more consultation and research is required to verify the level of significance.

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 have high research value at the local level and moderate

value at the regional level. The prehistoric archaeological remains at this place are significant to the local Aboriginal community and the Dharawal 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 La Perouse Headland is one of the first sites in Sydney visited by Europeans, being the last landfall of the La Perouse expedition in 1788. During their brief occupation of the headland, the French explorers fraternized with members of the First Fleet who were anchored nearby in Botany Bay.

The national significance value of the place arises from the early high level of French regard for the La Perouse expedition. The resulting ongoing and emotional French attachment to the place is a rare ongoing cross-cultural attachment with 'place' in Australia. The attachment is celebrated to this day with annual events and personal pilgrimages to the French Monument and Pere Le Receveur's Tomb. The headland has high potential to retain archaeological deposits association with the six-week occupation of the La Perouse Expedition. The ongoing visitation by French nationals has some national significance value.

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 thought to have been commissioned by Governor Macquarie is the oldest surviving watchtower in Australia. It is the only known tower in Australia 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 stylistic 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 under sea, 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 under sea 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 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 additional interest to the precinct.

1.0 Introduction

1.1 This Stage 1 Report

This Stage of the preparation of a Conservation Management Plan (CMP) addresses the La Perouse Headland area of Botany Bay National Park. However, Stage 1 of the CMP preparation is limited in scope to the consideration of the significance values of:

- The Macquarie Watchtower
- The Cable Station (containing the La Perouse Museum)
- The La Perouse Monument,
- The Pere Receveur Tomb, and
- Associated Aboriginal and Archaeological sites.

Consideration of Bare Island and the overall landscape including the coastline and the incorporation of a consultation program being run concurrently with community groups is the Stage 2 and 3 component of the project, which will also incorporate the findings of this Stage 1 project.

The Historical Background of the study area has been prepared as a separate report by Dan Tuck. 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 (LPHA) 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. Most notably the first recorded European occupation was by a French expedition led by La Perouse. They landed to re-build and repair their boats, while the First Fleet were still in Botany Bay in 1788, before the Fleet departed for the more suitable Port Jackson.

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 Pere Le Receveur, a Franciscan monk and naturalist, who died on February 17th 1788, and was buried at La Perouse. In 1828 at the instigation of the French government a monument was erected to La Perouse and a more substantial tomb was erected for Pere Le 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 and then as a Customs Station and residence. 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 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 has been plagued by structural issues associated with the use of poorly made concrete; it had a brief operational life.

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 tram line, which opened in 1902.

The Botany Bay National Park including the La Perouse Peninsular 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 Peninsular 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 produce the first stage of a Conservation Management Plan for La Perouse Headland, through the review of existing documentation and the preparation of:

- 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 and 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.

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.

A separate history has been prepared by Dan Tuck, 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 Location & Study Area

The study area is located on the south east coast of the Sydney metropolitan area. It is the northern headland of Botany Bay National Park. The study area for Stage 1 is illustrated in Figure 1.2. This stage of the project does not include Bare Island or the roadway (La Perouse Road) which is not managed by the Parks & Wildlife Service. Figure 1.1 shows the metropolitan context of the site.

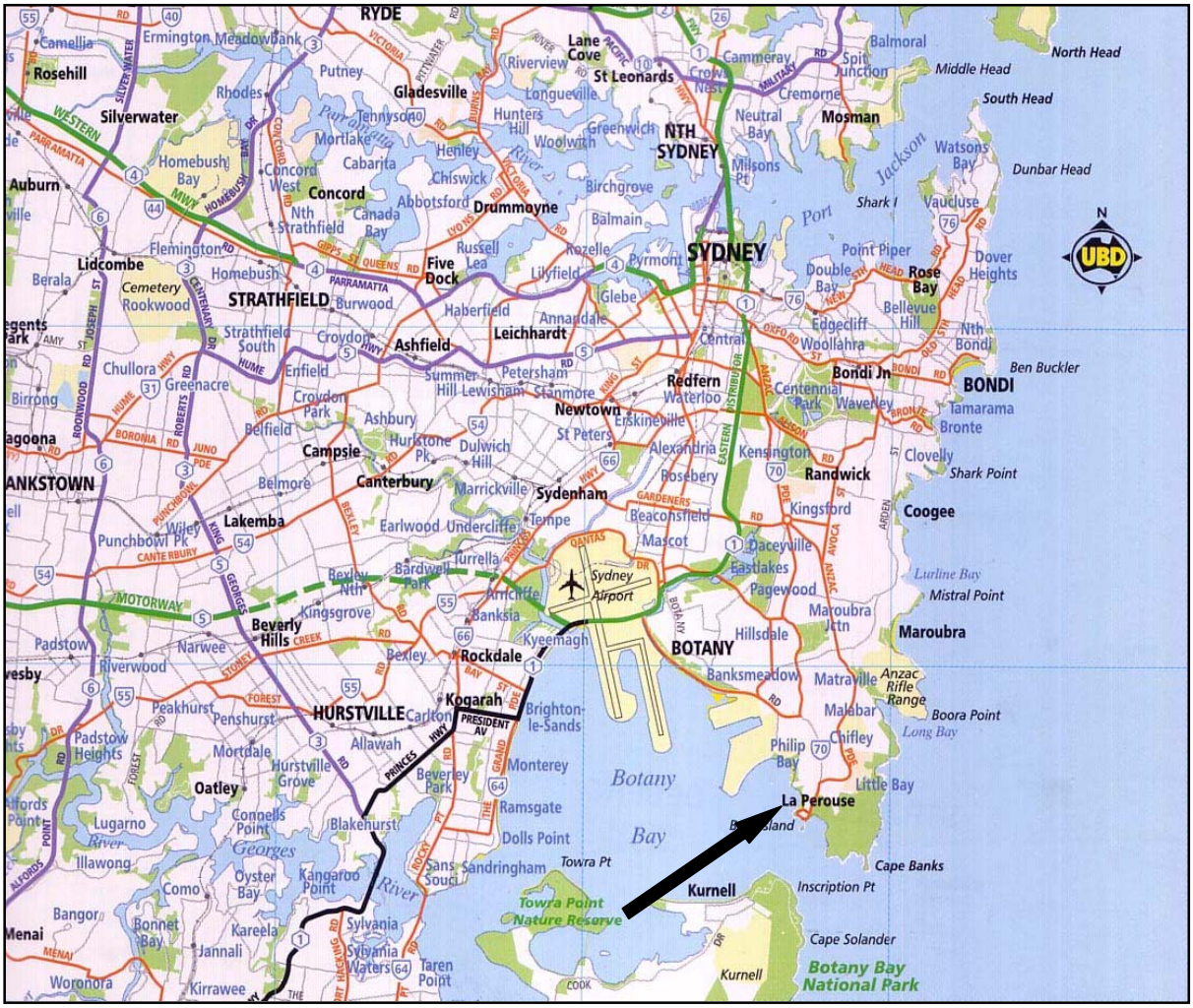


Figure 1.1 The location of the La Perouse Headland site within the Sydney Metropolitan region.

Figure 1.2 The La Perouse Headland and Bare Island showing the Study area. Plan provided by Parks & Wildlife.

1.6 Heritage Listings

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.

Register of the National Estate

Listed on the Register of the National Estate are:

The La Perouse 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 La Perouse Memorial Group (The La Perouse 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

La Perouse 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 N0. 97, Gazette Page 5020.

La Perouse 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,

La Perouse Monument,

Le Receveur's Grave,

Gardens and Lawns, and

Overall listing for the La Perouse Headland.

1.7 Acknowledgements

A number of people have been helpful in preparing this report including Cath Snelgrove, Senior Field Officer, Sydney Region and site manager Ranger Kaiya Donovan and Senior Field Officer Robert Couley. 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

Iris Williams, Dharawal Elder

Beryl Beller Timberry, Dharawal Elder

Liala Haglund, Heritage Consultant

Susan McIntrye, Heritage Consultant

1.8 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;

Hilary Sheppard - Contextual analysis;

Mary Dallas - Aboriginal Archaeology;

Eric Tierney - mapping and field assistance.

2.0 Historical & Environmental Background

2.1 Historical Background

A comprehensive Historical Background has been prepared for the La Perouse Headland by Dan Tuck and has been provided in a separate volume as a component of this study.
It is titled:–

La Perouse Headland, Botany Bay National Park, NSW, A Shared History, 2007.

The Historical Background builds on the several previous studies of the Headland and Bare Island.

The findings of this Significance Assessment Stage 1 of the La Perouse Headland 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). In the final report the Historical Background will be modified to minimise duplication of material that better contributes to other sections.

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 following analysis. This section may be expanded in subsequent Stages of the project with input from an environmental heritage specialist in the assessment the heritage values of the landscape and the coastline.

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 the La Perouse (to the north). The rocky peninsula headlands, which rise to heights approaching 40 metres, are composed of Hawkesbury sandstone dating from the Triassic period.[2] This body of rock is the

[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

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]

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 Area, 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, La Perouse 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.

[3] Quaternary is the last 2 million years; Holocene is the last 10 000 years
[4] NPWS 1992: 2

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 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 *Westringia fruticosa*	*Baeckea imbricata*	Scrub Sheoak *Allocasuarina distyla*
Banksia ericifolia	*Leptospermum laevigatum*	Heath Banksia *Melaleuca nodosa*
Woollsia pungens	*Darwinia fascicularis*	*Epacris microphylla*
Hakea *Hakea dactoloides* & *teretifolia*	Spiny headed mat rush *Lomandra Longifolia*	Red bloodwood *Euclayptus gumminifera*

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 *Leptopsurmum 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 costal forest, as well as significant remnant areas of the once widespread ESBS.

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

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.

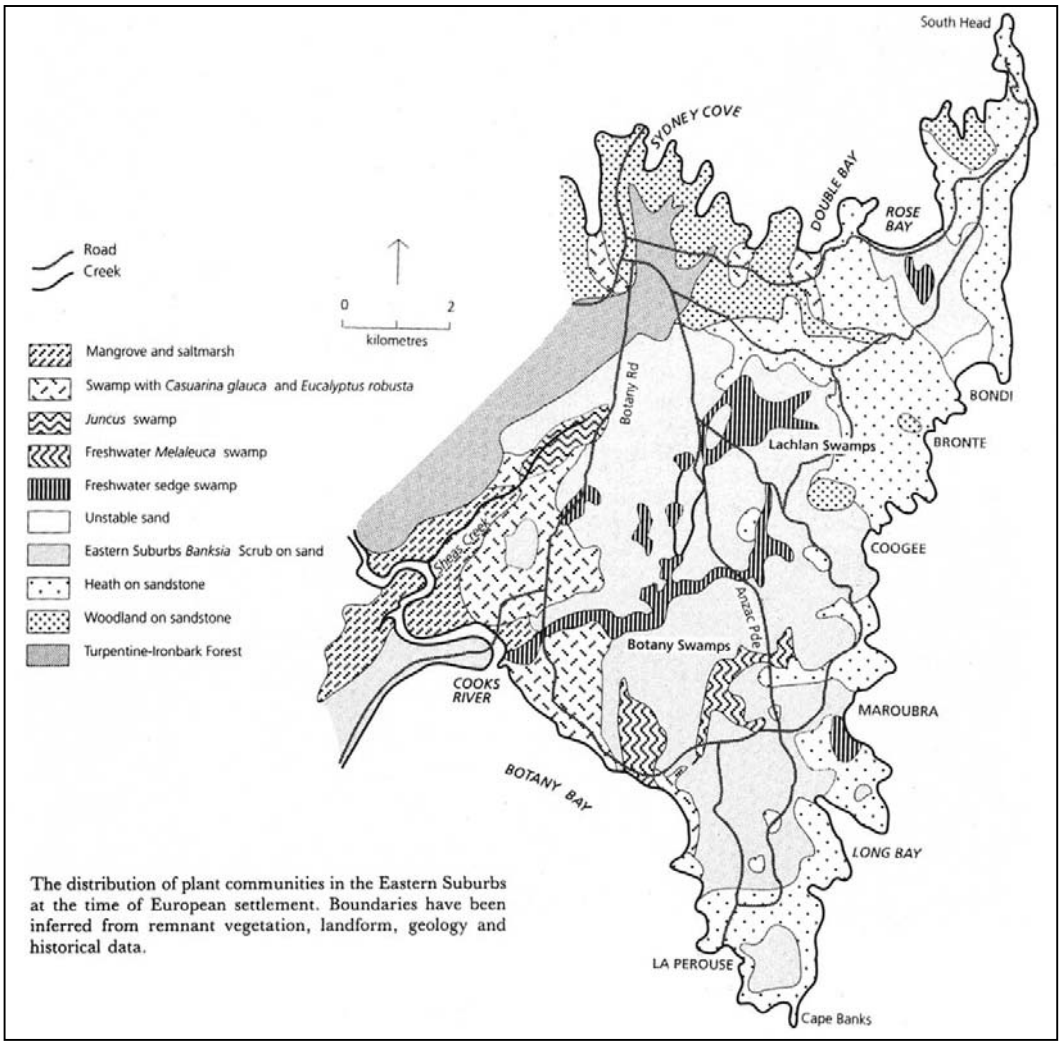


Figure 2.1: Pre-European Vegetation Landscape in Southeast Sydney
(Benson & Howell 1995: 90)

3.0 Buildings & Structures

3.1 Introduction

There are two standing building complexes within the Headland study area. The third building complex, the Bear Island Fortress is to be considered in Stage 2 and 3 of the preparation of this Conservation Management Plan. 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 sub-marine telegraph cable from 1876 to 1913. The current Cable Station building complex comprises:

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

In addition to the building complexes there are two structures:

- the La Perouse Monument, (Inventory No.6)
- Pere Le Receveur's Tomb. (Inventory No.7)

The seven inventory sheets that address each of the extant individual components of the extant complexes and structures are provided in Appendix A. 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 catch-up works for each building component are part of Stage 2 and 3 of the preparation of the CMP.

4.0 Aboriginal Archaeology

4.1 Regional Archaeology

Aboriginal people have occupied the greater Sydney region[5] 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 present[6]. Two dates ranging from between 10,500 to 12,000 ago have also been reported for an open camp site at Regentville[7], 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[8] and Rouse Hill [9] 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 streams[10]. It could be expected that many Aboriginal sites are presently occupation sites. Two other sites dated to around 7-8,000 years before the present comprise a sheltered midden at Curracurrang and an open campsite (containing a hearth) at the Prince of Wales Hospital in Randwick. The Prince of Wales Hospital site [11] 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 however 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 [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 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

5 The following discussion contains some summarisation from Dallas & Tuck 2005
6 see Stockton & Holland 1974 and Kohen et al 1984
7 McDonald et al 1996
8 JMCHM 1999
9 McDonald et al 1994
10 see Lampert 1971 and Bowdler 1970
11 see Dallas et al 1997 [also in GML 2002]

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 deposits at Newtown, 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. Regular burning of the scrub would have allowed easier walking through the otherwise densely vegetated slopes 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 wings. 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)

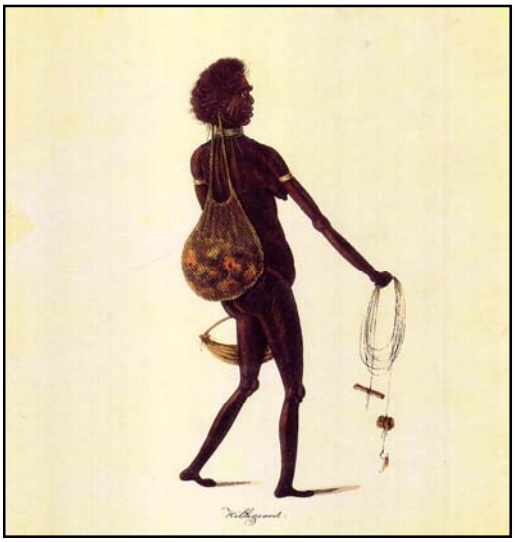


Figure 4.4: Richard Browne's watercolour of Killigrand (c1810)
Image depicts an Aboriginal fisherwoman with the 'tackle' of the time - line (with float & hook) and a net carry bag.
(Image presented in Radford & Hylton, 1995: 21)

Stone tools are largely specialized items for particular methods of hunting [stone tipped spears, spear throwers,] and hide or wood working [scrapers, hatchets] for the production of spears and canoe 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 bipolar cores and flakes, and burins. The change from the *Capertian* to the *Bondaian* appears

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

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 materials	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 materials	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 materials	include 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 sites[13] 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 area[15]. 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 DEC 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.

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.

4.3 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 Perouse Expedition but it is not well documented. Lieutenants King & 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 emplacements[26]. The location of the stockade is not known. Kass 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. Higginbotham 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) which describes the site as still visible and cleared of trees.[27] 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'.[28] The historian Selkirk had concluded that Bougainville had made an error and meant east not north. Higginbotham believes the ambiguity may arise from the translation.

However, given that the best anchorage for their ships was being tucked into the southern corner of Frenchman's Bay where yachts and pleasure craft are now moored, it seems most likely that the stockade was located between the site of Pere Le Receveur's grave and the La Perouse monument, at a place where moving the new/repaired longboats to the water would be a short distance and assisted by the slope of the local topography.

Because the location of the stockade has not been 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 very likely however that archaeological evidence related to this period would be ephemeral consisting of the remains of timbers, possibly garden edging and refuse pits or deposits.

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 'skilling of 14 feet by 10 feet for boatman was adjoined to the tower. 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 Kass as a large hut and two smaller huts, possibly privies.[29] Two additional cottages were added in 1861

[26] Selkirk 1918:339 (Quoted by Tuck 2006)
[27] 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 Esperence Round the World*, 1824-6, quoted in Selkirk, '*La Perouse*': 352
[28] Kass, 1989 Draft Report: 10
[29] Kass, 1989 Draft Report: 15

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 'Artillery Quarters'. The Cable Station was constructed with the loss of a garden and enclosure and some small outbuildings. 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 below to show areas with high archaeological potential (additional map searches may locate additional sites).

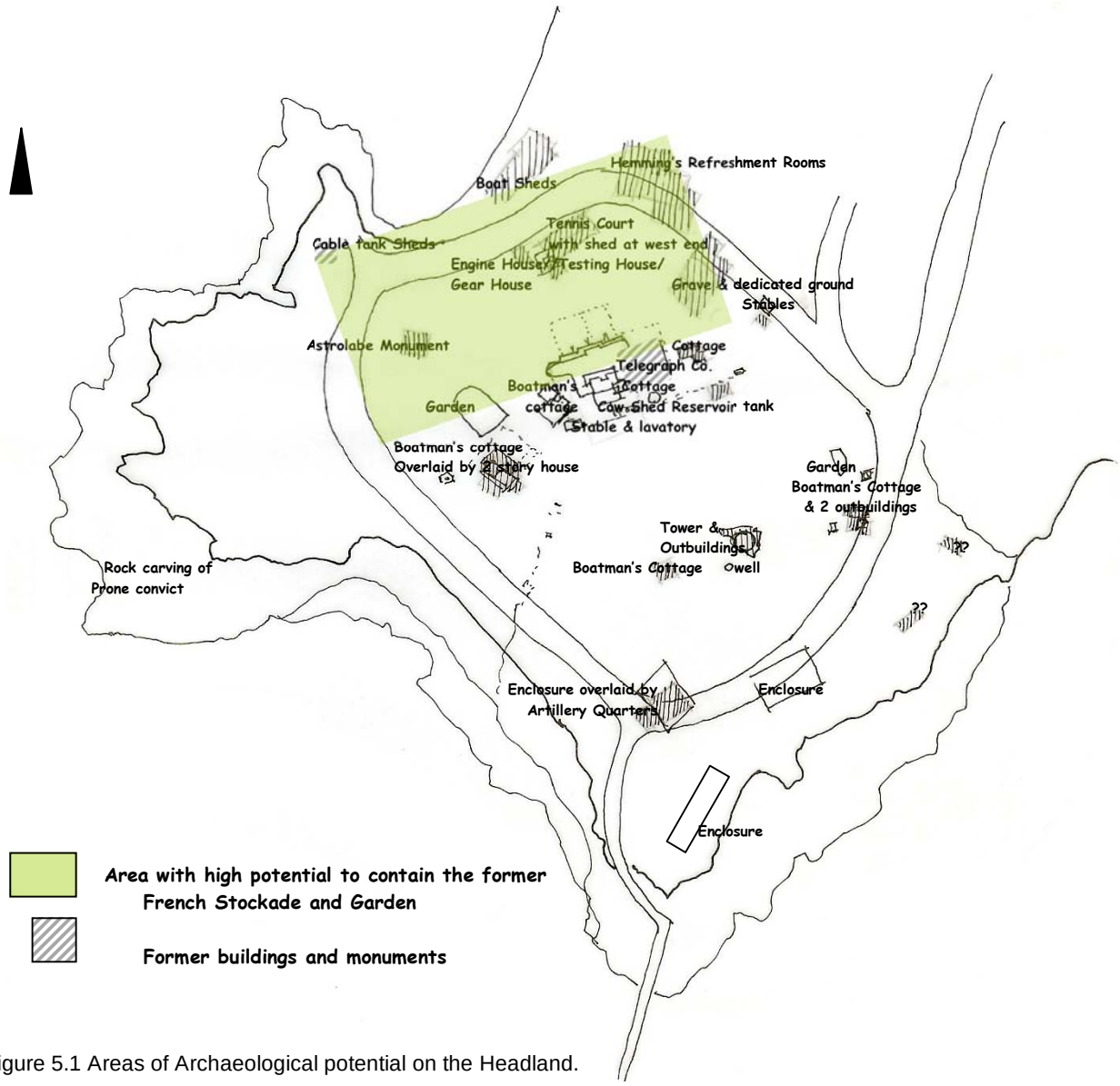


Figure 5.1 Areas of Archaeological potential on the Headland.

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.

Table 5.1 Visible archaeology sites, archaeological potential and assessed significance as recorded by Higginbotham 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
26.	Two storey building	None	Local
27.	La Perouse Monument	Low	International #
28.	Tomb of Pere Le 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	High	National***
35.	Cistern or underground tank	Moderate	Regional

Note: No location map for sites was supplied with the Higginbotham report or the inventory and a survey to re-identify locations was outside the scope of this stage of the report. Figure 5.1 was developed to assist the site manager to recognise areas of archaeological sensitivity.

* 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.

The assessment of the significance of the Tomb of Le 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 and with de Bougainville.

** 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.

*** The Macquarie Watchtower similarly 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.

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 5.2 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	*None provided*
65	Edward Henning's House	Moderate	*None provided*
68	Artillery Quarters	Moderate	*None provided*
75	E Henning's Stables	Moderate	*None provided*
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 page 63 in the September 1989 Report.

Again items identified in 1989 as being of International and National significance would not 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 and the La Perouse Cable Station within the context of the development of similar enterprises or structures and 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…'[30]

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. 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 out of service 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 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.

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

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

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.

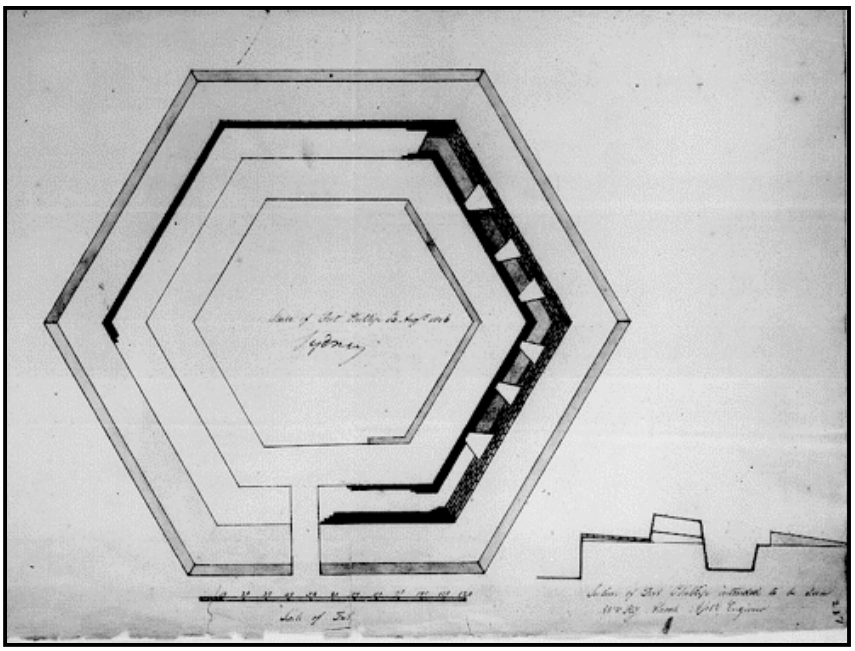


Figure 6.2: Plans of Fort Phillip – Reproduced from the Mitchell Collection Series 43. c1804.

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 watch tower 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 Office 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 the 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).[31] It is possible that Druitt designed the Macquarie Watchtower.

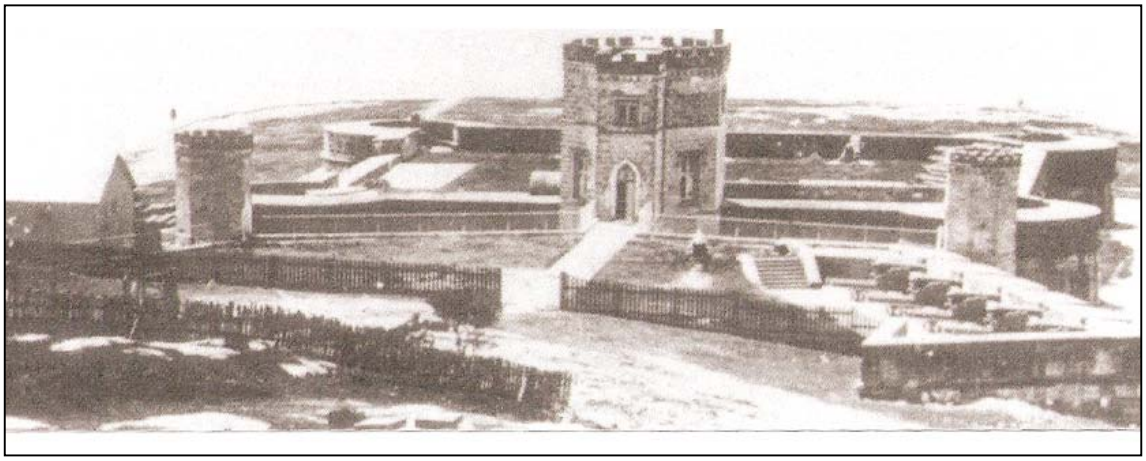


Figure 6.3: Fort Macquarie c 1865. Photograph reproduced from Oppenheim P 2004.

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

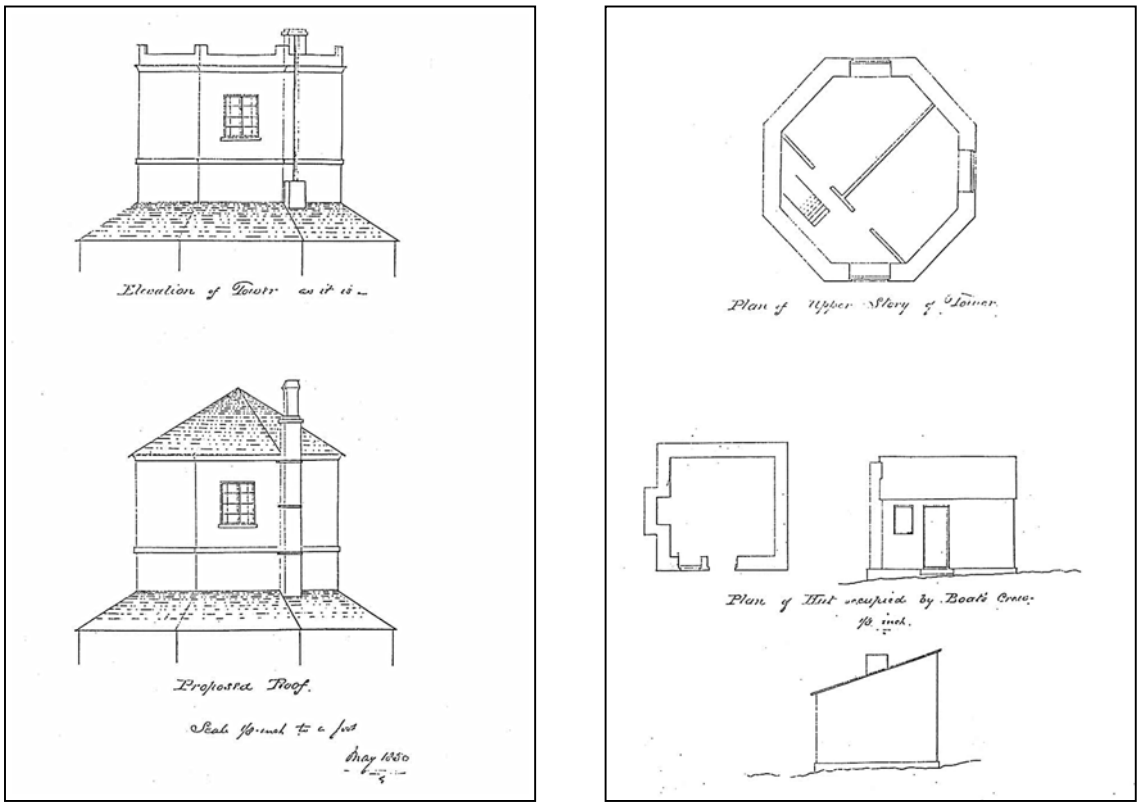


Figure 6.4: The Macquarie Watchtower, drawings showing the planned repairs and alterations to the tower in May 1850. Reproduced from SRNSW AO 2/653.
This image suggests that the crenellations only occurred at the junction of each facet and therefore there were only eight around the building parapet.

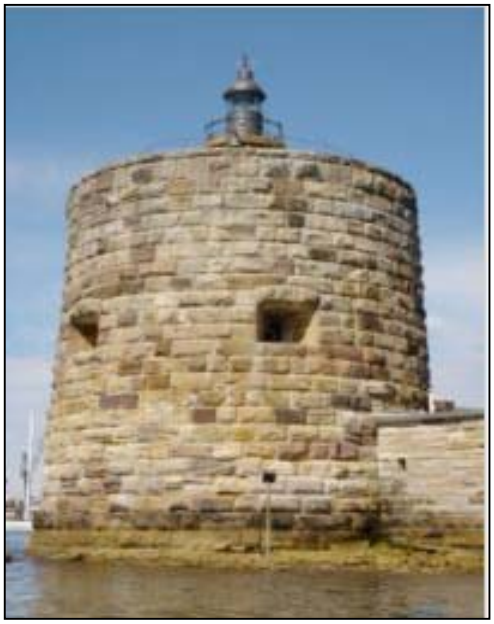
The next major fortifications of Port Jackson were not built until the 1850s, by which time the technology used as the basis of their design was so quickly surpassed that by the time the buildings were finished they were largely obsolete. The next two major fortifications during this period were the 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 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.



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.

Figure 6.5 Martello Tower, Fort Denison. Reproduced from Wikipedia. Available; www.en.wikipedia.org/wiki/Martello_tower

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.'*[32]

[32] 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

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.

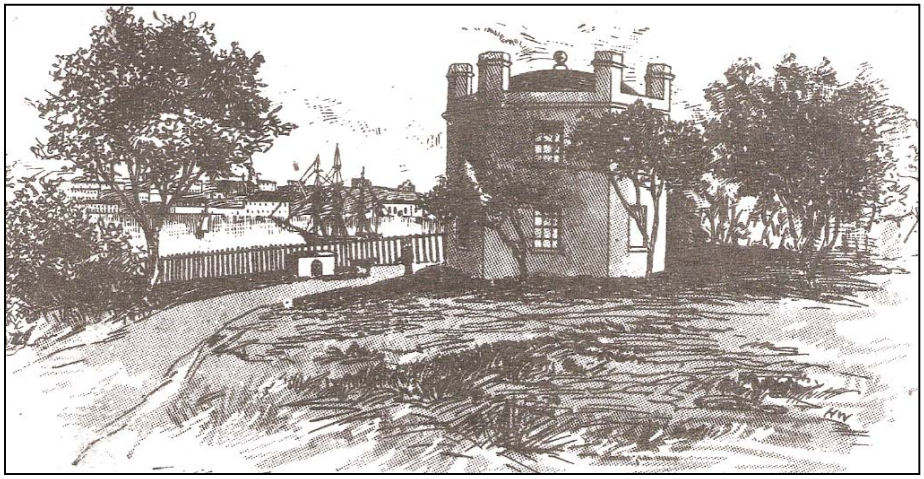


Figure 6.7: A slightly different view titled 'Billy Blues Point'. Reproduced from Swords M 1979.

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 Vanishmen*t.]

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

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 the Service 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.*[33]

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.

[33] 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 was opened in Britain (21 km between London and West Drayton).[34]

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.[35] 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.[36]

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 is 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.[37] 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.[38]

[34] Airey E 2005 The Taming of Distance; New Zealand's First International Telecommunications, Dunmore Publishing, Wellington, New Zealand.
[35] Beauchamp K c2001 History of Telegraphy, Institution of Electrical Engineers, London.
[36] Beauchamp K c2001,
[37] See http://www.1911encyclopedia.org/Gutta_Percha
[38] Beauchamp K c2001, p137

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.[39]

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.[40]

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.

[39] Airey E 2005, p4.
[40] Beauchamp K c2001, 172

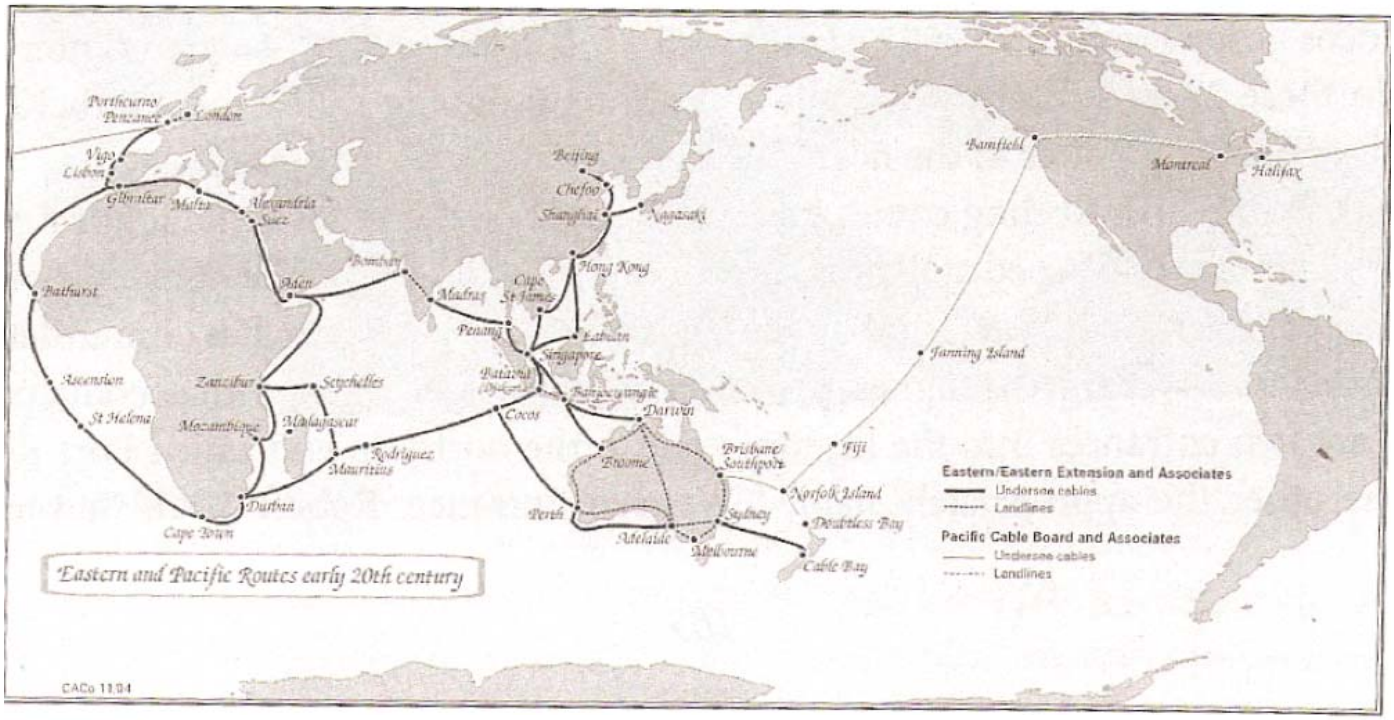


Figure 6.9 Eastern and Pacific Telegraph routes in the early 20th Century. Image reproduced from Airey E. 2005.

Figure 6.10 The landing of the Australian New Zealand telegraph cable on 11 February 1877. Reproduce from Miller M c1992.

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.[41]

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)[42] and then more successfully with the Eastern Extension Australasia and China Telegraph Company (EEACTC).[43]

An agreement was finally signed on the 24th of June 1875 between the governors of New Zealand, New South Wales and EEACTC.[44] 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.[45]

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).[46]

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41 Airey E 2005, p41.
42 Beauchamp K c2001, p144.
43 Airey E 2005, p41.
44 Airey E 2005, p41.
45 Airey E 2005.

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' form 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.[47] 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.*[48]

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.[49]

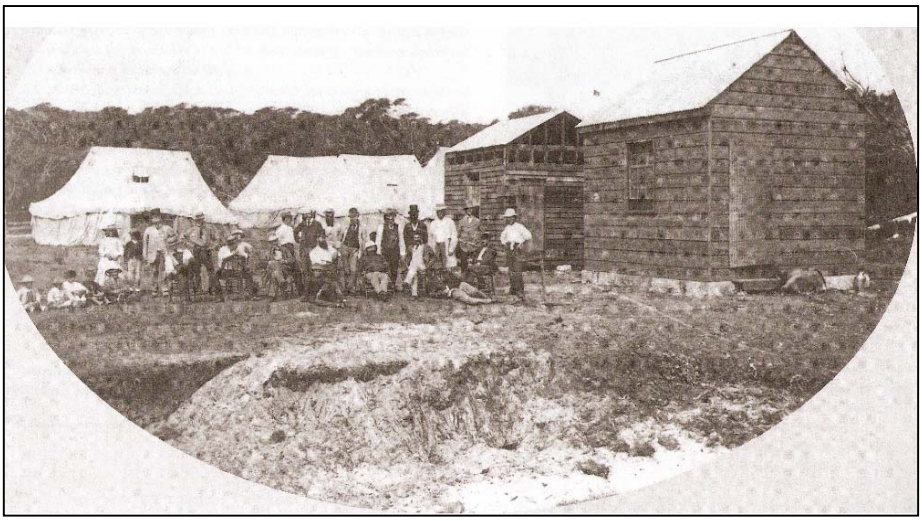

Figure 6.11: The first, temporary La Perouse Cable Station buildings, Engineers and staff in the foreground. 1877. Reproduced from Miller M, c1992.

[46] 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.
[47] Beauchamp K c2001, p176.
[48] Beauchamp K c2001, p177.
[49] Miller M c1992 Gentlemen of the Cable Service; A pictorial History of Australia's Overseas Communications Service 1870-1934, P7

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.[50]

Many cable operators stayed with the cable service for their whole working lives.[51]

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 '*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)	F	English Chanel Submarine Telegraph Co.	
1851	Dover – Cap Griz Nez	44	Submarine Telegraph Co.	First successful cross channel cable
1852	Portpatrick-Donaghadee	F	English and Irish Magnetic Telegraph Co.	
1853	Portpatrick-Donaghadee	64	English and Irish Magnetic Telegraph Co.	
1853	Holyhead-Howth (Ireland)	f	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	F	Mediterranean Telegraph Company	
1855	Italy-Sicily	9	Glass and Elliot Co.	

[50] Miller M 1992 P7
[51] Miller M 1992 P7

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	F	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 1st India cable
1861	Malta-Tripoli-Bengazi-Alexandria	2471	Glass and Elliot Co.	
1861	Newhaven-Dieppe	129	W T Henley	
1864	Gwadur-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.	1st 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	Batabanõ-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 1900	Paris-Manars St Vincent-Ascension-St Helena-Capetown	2639 7700	Amazon Telegraph Co. 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 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)

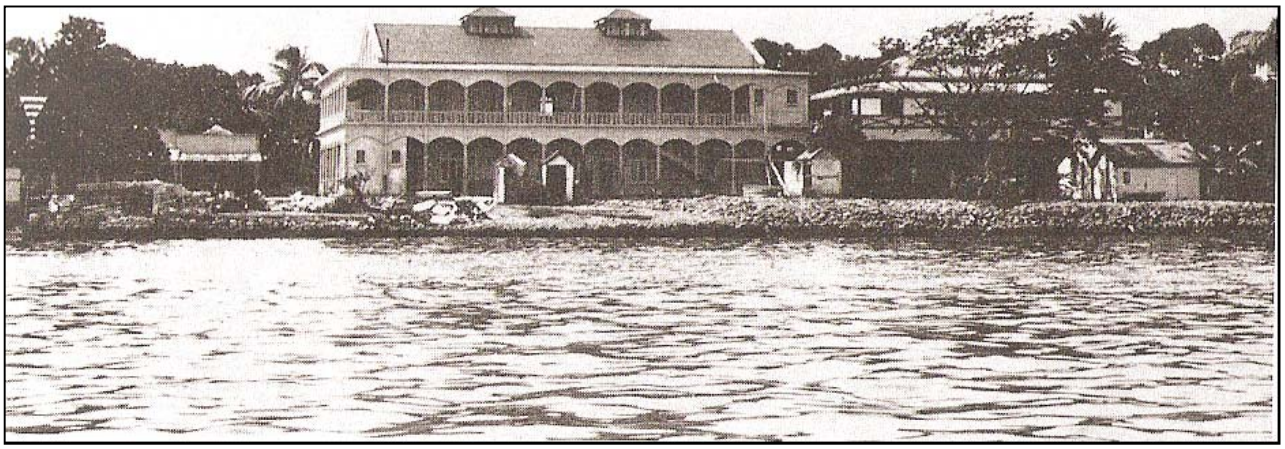

Figure 6.13: Cable Station at Suva, Fiji c1924. Photograph reproduced from Scott B R 1994.

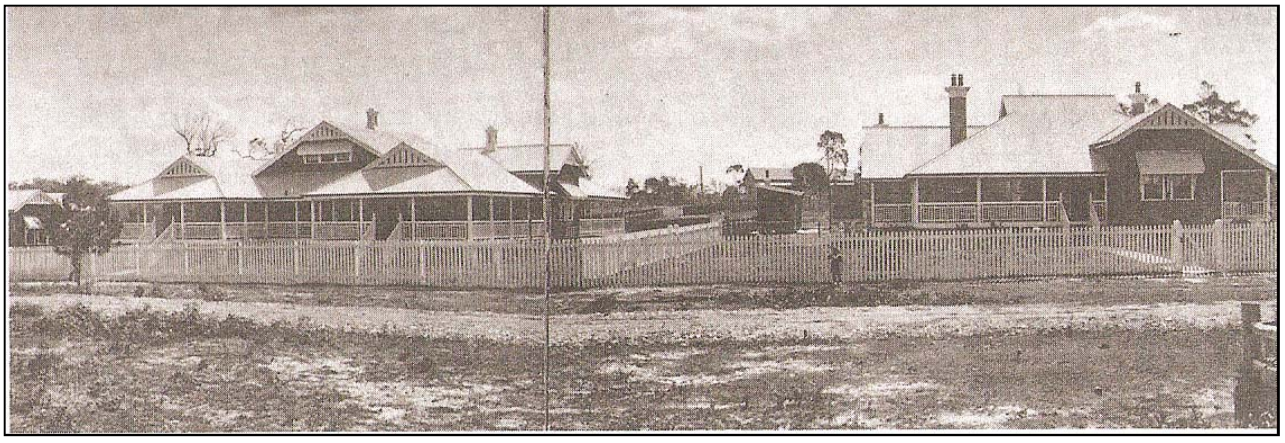

Figure 6.14: Cable Station at South Port, Adelaide. The building on the left contained living quarters for several operators and the matron of the training school which was based at the station. The second building housed the manager's office, operations room and probationers quarters. (Reproduced from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

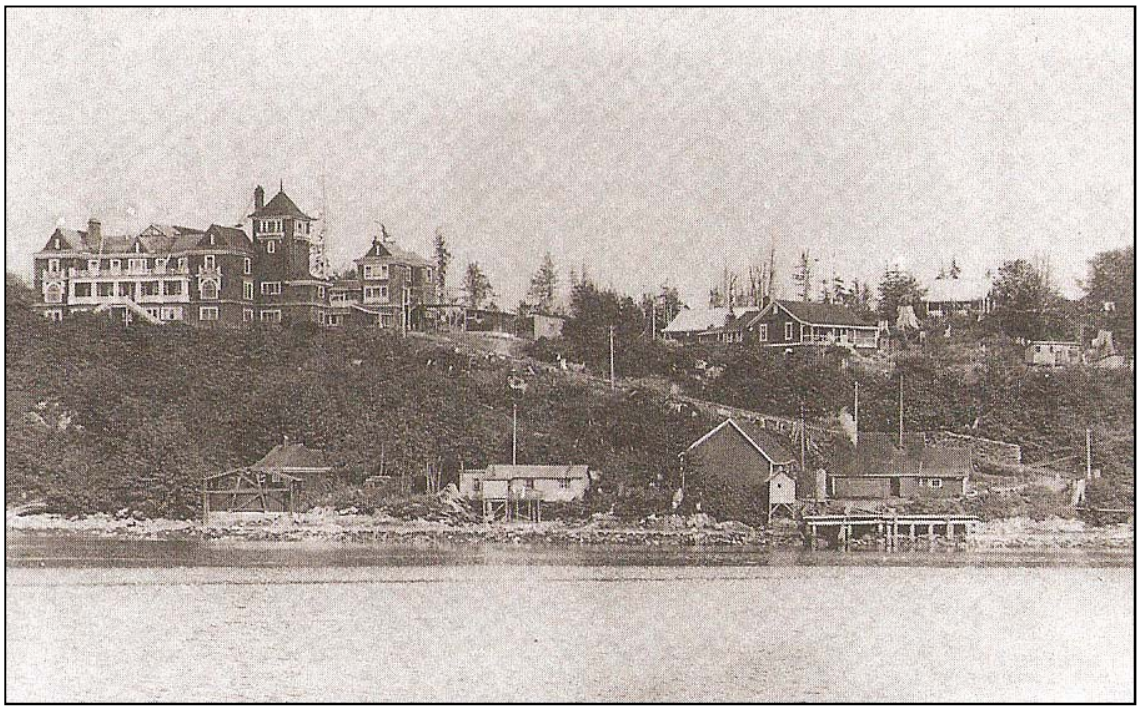

Figure 6.15: Bamfield Cable Station and wharf at Bamfield Creek, British Columbia, c1918. On the hill to the left is the main building which housed the manager's office, operating room, bachelors'' quarters, mess hall and telegraph room. Married staff cottages are on the right and in the centre front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

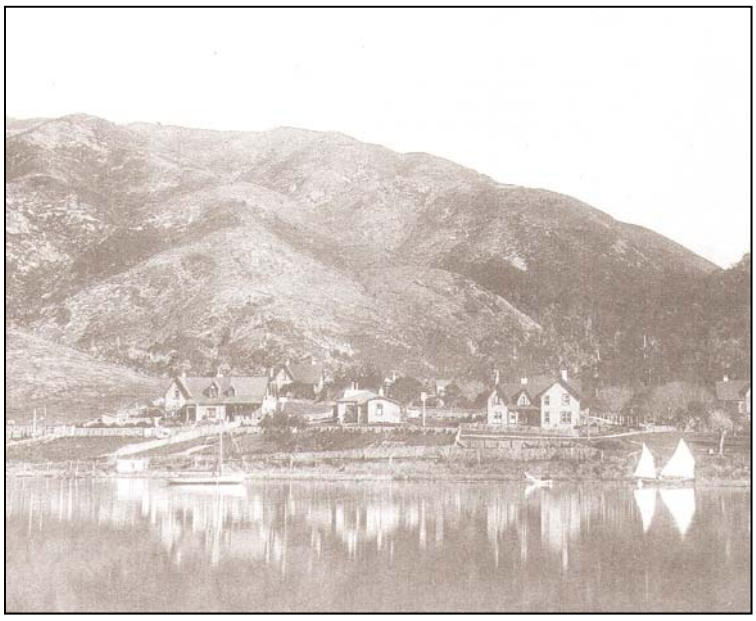

Figure 6.16: Cable Bay Station c1880s. Photograph reproduced from Airey E 2005.

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.

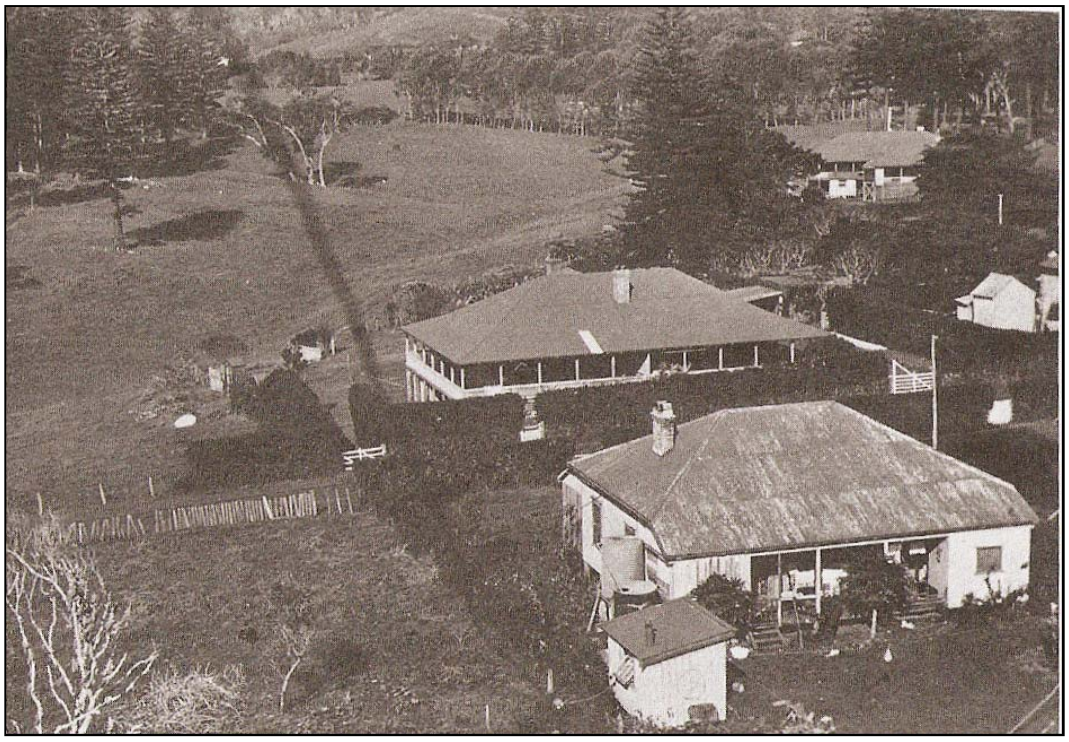

Figure 6.20: Cable Station and Residence Norfolk Island c1930. Photograph Reproduced from Scott B R 1994.

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 La Perouse Station is a good representative example of a substantial public works building; it demonstrates Victorian Regency and Victorian Mannerist stylistic influences. Within the cable station group, the building is unusual for catering to two cable company operators with duplicated residential wings. 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.

6.8 The La Perouse Monument & the Tomb

These are unique pieces associated with the last known landfall of the La Perouse 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. An exception is the carvings at North Head associated with occupants of the Quarantine Station. However, those carvings are text rather than three dimensional objects. Unfortunately the origins and age of the figure at La Perouse are not known.

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 to assess places owned by the Commonwealth Government. A place meets the criteria for the Register of the National Estate if it has significant heritage values. These criteria are broadly related to those presented in the Burra Charter and those developed by the New South Wales Heritage Office and Department of Urban Affairs and Planning as gazetted 23rd April 1999.

As part of the Australian Heritage Commission's recognition of National Estate values a series of assessment criteria have been developed for use in assessing heritage items, places or natural environments. These criteria are broadly related to those presented in the Burra Charter and those developed by the New South Wales Heritage Office and Department of Urban Affairs and Planning as gazetted 23rd April 1999.

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.

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);

The re-location of Aborigines to the headland area and the consequent 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.[52]

Aboriginal sites within the area demonstrate the evolving pattern of Aboriginal cultural history and patterns of movement through the region.

The suite of archaeological Aboriginal sites on the La Perouse Headland is representative of a local occupation pattern, which is not well understood. The relationship of these sites to others in the region is also not understood, although there are common themes in one class of site - the rock engravings.

The historically remote, yet strategic location of La Perouse as the 'back door' to Sydney 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.

The 1788 occupation of the headland by the French expedition led by La Perouse, 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.[53]

The Macquarie Watchtower is associated with the 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.

[52] See Tuck, 2007 Draft History: Section headed La Perouse Aboriginal Camp: 108
[53] 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.

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.

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 growing as transport options improved.

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);

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

The continued occupation of the La Perouse area by Aboriginal families within and around the Headland site is a rare ongoing association with place in the Sydney region although the Aboriginal people's association with the area was to some extent truncated by the white settlement.

The place also has a long history of interaction between local Aborigines and tourists.

La Perouse is also a place associated with the industriousness of the Aboriginal people who engaged in commercial fishing and the headland was the focus of tourism related craft making and particularly the making of shell baskets by the local women for sale to tourists as well as other activities to bring in an income.

Fishing mullet and salmon on a run off the all-weather beach, Frenchman's Beach using long boats and manually hauled nets and using spotters from adjacent headlands was a continuation of traditional fishing practices[54].

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 La Perouse expedition.

It is the site of the grave of Pere Le Receveur, a Franciscan monk and naturalist on the expedition,

[54] 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.

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 La Perouse Expedition held by the officers of the French expedition ships, who collected money among themselves to raise the monument.

The La Perouse monument and Pere Le Receveur's grave 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,

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.

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);

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 adoption of long net fishing in post contact times by Aboriginal people evidences early adoption of technological advancement in fishing techniques, building on their traditional practices.

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.

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;

The following aspects identified in the Social Values Assessment project[55] are of significance to the people of NSW: -

The place is significant to the people of NSW at a State level for the following social, cultural or spiritual reasons:

- The place is valued by people who have visited over many decades and continue to come to see and interact with Aboriginal people (a rare opportunity in the Sydney region); 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.
- 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 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 social 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 and boomerangs). These

[55] Context Draft Report, La Perouse Headland, Botany Bay national Park (North), Social Values Assessment, 31 May 2007:15-16

activities occurred at favourite locations visited by family groups over several generations.

The place is valued by the present local community living in the vicinity of the headland and interacting with it everyday 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
- The 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
- site of community activism for the protection of the place at times of threat over many years
- the close-knit village community atmosphere, strengthened by the feeling of being at the 'end of things'
- the layers of history and associations with key historical figures and events
- sharing these values with visitors and tourists to the place over many years
- appreciating Aboriginal culture and interacting with the local Aboriginal community.

Re-used for a number of accommodation functions including as soldier's accommodation, a Nurses Home and for some 43 years as a Salvation Army refuge for women and children and most recently as a local museum, and a repository for modern French ship's plaques, the Cable Station building has a high level of social attachment.

The attraction of tourists to the La Perouse Headland in the past derived from its picturesque location, historic associations and the interaction with the local Aboriginal population. All of these factors still operate to draw visitors to the headland, which together with the museum displays and site tours allows the history and association of the place to be conveyed to visitors.

The ongoing association with the French community expressed in annual events and personal pilgrimages is a strong expression of international community regard for the place.

The whale and calf engraving is currently significant to the local Aboriginal community and there has been at least one relatively recent attempt to re-groove or re-cut the site.

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);

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

The headland has potential to retain archaeological evidence of the early occupation of the Macquarie Watchtower and of the associated 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.

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

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.

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);

The post contact history and development of the La Perouse Aboriginal community made up of re-located people is a successful example of a series of families maintaining strong and continuous associations a place and at the same time retaining their separate cultural identity. [56]

[56] 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 commerce of the local Aboriginal people developed around the local tourism, which is a 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 coast[57].

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

It is a rare place where an emotional link was forged between the French and British colonists who both mourned the loss of the La Perouse 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 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 superceded 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 the only substantially intact, surviving cable station building in Australia and was one of only a small set ever built in Australia.

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

[57] 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.

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.)

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.

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.

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 Significance[58]

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)

[58] 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/creiteria.html

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. [The last landfall of the La Perouse Expedition and a place of ongoing French pilgrimage]

(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.

(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.

(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;

(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.

(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.

(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; [The ongoing and emotional French attachment to the place celebrated with annual events and ongoing traditions]

(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 La Perouse expedition]

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

7.3.2 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. However, the La Perouse headland is unique because of its association with the La Perouse expedition and the ongoing, site-specific relationship with France.

With the loss of the La Perouse expedition, its last landfall the La Perouse headland became an important symbol particularly for French mariners. It is a place where their high regard for La Perouse 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 ongoing relationship with the French expatriate community and with visiting French mariners appears to be a historically important cross-cultural exchange within Australia that is arguably important to the Australian community as a whole.*

The social significance workshops identified the place as having 'potential national significance as the site of Aboriginal community survival and protest'.

> *This value applies to La Perouse Headland in the context of the wider landscape, including the southern headland on the opposite side of the bay. This potential national significance would need to be explored further with the local Aboriginal community as part of the consultation within the Meeting Place project over the next two years.*

On the basis of the above discussion the La Perouse headland appears to meet the both the Australian National Heritage List criteria and its threshold only for its historic associations and potentially as a site of Aboriginal community survival and protest.

7.4 Summary Statement of Significance

La Perouse Headland

The La Perouse headland precinct is a place of State and national significance value. 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 association between Aboriginal people and the La Perouse headland is of State significance value. It is potentially of national significance value as the site of Aboriginal community survival and protest. However more consultation and research is required to verify the level of significance.

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 have high research value at the local level and moderate value at the regional level. The prehistoric archaeological remains at this place are significant to the local Aboriginal community and the Dharawal 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 La Perouse Headland is one of the first sites in Sydney visited by Europeans, being the last landfall of the La Perouse expedition in 1788. During their brief occupation of the headland, the French explorers fraternized with members of the First Fleet who were anchored nearby in Botany Bay.

The national significance value of the place arises from the early high level of French regard for the La Perouse expedition. The resulting ongoing and emotional French attachment to the place is a rare ongoing cross-cultural attachment with 'place' in Australia. The attachment is celebrated to this day with annual events and personal pilgrimages to the French Monument and Pere Le Receveur's Tomb. The headland has high potential to retain archaeological

deposits association with the six-week occupation of the La Perouse Expedition. The ongoing visitation by French nationals has some national significance value.

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 Governor Macquarie. 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 stylistic 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 under sea, 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 under sea 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 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 additional interest to the precinct.

8.0 Bibliography

Preamble

The following bibliography includes sources used in the Historical Background which is provided as a separate volume, as well as the sources for this volume

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APPENDIX A - Buildings & Structures Inventory:

01 Watchtower

02 Cable Station

03 Battery Room

04 Store Room

05 Courtyard

06 La Perouse Monument

07 Pere Le Receveur's Tomb

08 Miscellaneous Items

Name of Place:
Macquarie Watchtower

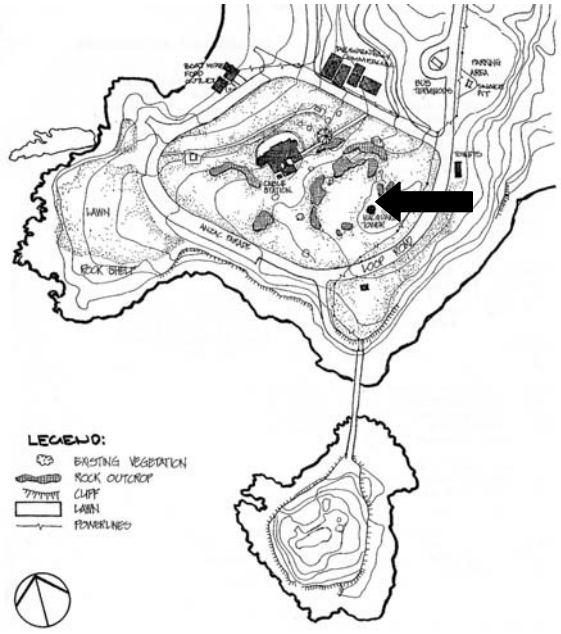
Inventory:
1

Current Use and Associated Items: No Current use except storage, nearby items are a cast concrete retaining wall, flagstone surround & sandstone block cistern.

Other/Former Uses and Names: Government troop outpost & watch tower to 1831; Customs out-station 1831-1904, 'Delapérouse'; caretaker accommodation to c.1960; from c.1960 landmark monument.

NPWS Item ID SHI ID

Location Plan



Photograph

Fig. 1 Macquarie Watchtower.

CONDITION: Good Fair Poor Ruinous Site Only **INTEGRITY : High Moderate Low**

Physical Description

Macquarie Watchtower is a two storey, octagonal Sydney sandstone tower with an exterior diameter of 7240mm. The tower is also approximately 7240mm high, which is unusual as towers are usually higher than they are wide. The external coursed, sandstone walls are 600mm wide. The c.1961 crenellated parapet wall sits approximately 1450mm above a concrete slab roof. The concrete roof and the two suspended reinforced concrete beams it sits on were also inserted in 1961. The beams are showing evidence of spalling. The roof is drained with short copper spouts on four sides. The four original windows on each level on the facets between the main compass points (ie north-east, south-east, north-west & south-west) have been infilled with sandstone blocks and the window sills have been repaired with cement render. The single Gothic arch headed wooden entrance door is on the southern wall facet. The circumference of the base of the tower has been paved with random flagstones set in mortar in an attempt to assist water to run away from the building. The insertion of the flagstones is thought to be part of the 1961 works. The northwest walls are showing evidence of abrasive weather damage to individual stones and some of the mortar has been worn away. The interior is essentially an empty space with a fireplace set in the north wall facet and a single timber beam at first floor level. The floor is a reinforced concrete slab installed in 1961. A sacrificial plaster skin was applied in 2005 to around 1000 mm to intercept rising salts.

Brief Historical Background

Constructed c.1822 as a watchtower to house 'in lieu of huts' a small detachment of troops assigned to watch the Bay for smugglers and misguided vessels. (Kass 1989:15 Sydney Gazette, 22 March 1822) It is assumed that the reference to 'misguided' vessels is mainly to foreign incursions. The tower fulfilled this role until 1826. During that time the troops appropriated the garden established by La Perouse in 1788.

The building appears to have been abandoned from 1826 when the troops left until 1829 when initial works were carried out so that it could function as accommodation for a caretaker, who would oversee the recently erected La Perouse monuments. However, in 1831 the Customs Department acquired the La Perouse stone tower to be one of a string of its coastal customs out-stations. It required significant repairs to accommodate the staff comprising a Tide-waiter and two Boatmen. The additional accommodation requirements appear to have been met by the construction of a boatman's hut and a separate skillings hut, mentioned in 1833 correspondence, and a privy. The repairs and improvements carried out c.1832 by James Walsh, a stonemason based in Castlereagh St were not entirely successful and the ingress of storm water through rooves and windows was an ongoing problem. A storm destroyed the windows and kitchen of the tower in 1835 and by 1837 it was considered near uninhabitable. In 1850 a proposal was put forward to replace the crenulated parapet and flat roof with a pitched roof probably covered with slate tiles. It is not clear whether the works were carried out in the 1850s or in the early 1860s. At some time between 1835 and 1850 a skillion roofed, cabbage tree slab, building (possibly a replacement kitchen) was constructed butting against the tower. By 1863 skillion roofed additions occupied three sides of the octagonal tower. An 1850 assessment of the works required, proposed a new pitched roof to replace the extant flat, lead lined, roof and a new fireplace and oven in the tower, the replacement of window & door frames & other general repairs within the tower & to the semi-circular addition and certainly by 1864 a pitched roof had been added. The addition of the Boatmen's wives and families over time was too much for the available accommodation and by 1862, the Boatmen had built 3 new wooden huts and in 1863 a well was constructed by John Guile & Son – 'to serve as a tank for rainwater if no water was found' (Kass1989:22 SRNSW Colonial Architect correspondence). Based on Coles recommendations for improvements the Colonial Architect, James Barnet drew up plans for a new stone walled skillion surround that was completed by 1864. From around 1864 to 1873 a room in the stone tower, was used as a school for the local children including Aboriginal children. Around this time the tower was re-named Delapérouse. (Cox et al, 2001:55) The Customs House Station was allowed to run down from the 1880s. In 1903 the Customs Station was transferred to the Commonwealth Government, who passed it on, to the Department of Internal Affairs in 1904 and it became a retirement home at least initially for former Customs Officers and it housed a succession of at least 6 tenants up to 1950. In 1950 the tower site was reserved and placed under the care of the La Perouse Monuments Trust, who installed a resident caretaker. On October 1, 1957 a fire gutted the building and caused the death of Mary Donnelly, the caretaker's wife.

After the fire, the decision was taken to 'clean up' the site and reveal the original tower form. The 1961 Lands Department reconstruction work on the tower was intended to match as closely as possible its 1820s form, except for blocking up the windows to prevent vandalism. The form of the crenellations was conjectural and subject to some dispute. (See Figure 11. of this inventory for what are thought to be the original crenulations, replaced by the pitched roof at some time between 1850 and c.1864.) The Trust also erected the low coping wall around the tower and used the building as a tool and boat store. Work comprised refacing exterior stone work; removal and replacement of stones, with the new stones set in cement based mortar; restoration of the doorway, construction of a concrete slab roof; laying of a reinforced concrete slab floor to threshold level & installation of a brass explanatory dedication above the doorway.

NPWS now DEC Parks & Wildlife acquired the site in 1967. Rising damp has been an ongoing issue within the building and it has been subject to several works programs. Its main recent use has been as a landmark and for storage of cast iron gates from another P&W site.

Chronology of known works	
c.1822	Octagonal stone tower constructed; Government troops Stationed at the site
1824	Tower noted by Lycett and the crew of French Vessel Coquille
1825	Tower recorded by the French crew of the *Thetis* & *Esperance*
1826	Troops withdrawn; tower falls into disrepair (1/2 lead roof stripped)
1827	Watchman installed (Patrick Lally)
1829	Director of Public Works called for repairs to the tower including a shingle roof & sash windows to replace shutters.
1831	Customs Department acquire tower as a Customs out-Station
1831 - 1833	Repairs to tower Construction of skillion shed, boatman's hut & privy
1835	Storm destroys kitchen in tower
post-1835 (?)	Construction of a skillion attached to the tower (contains kitchen)
pre-1864	Construction of a peaked roof on the stone tower replacing the former flat roof
1861 1862	Three wooden boat huts constructed along with some 'additions'
1863	Well constructed (for use as a well or storage tank for roof runoff) Repairs on tower
1864	Cabbage tree slab skillion demolished & new stone walled skillion attached to the tower constructed
1868	Room in tower dedicated as a schoolhouse
1873	Purpose built weatherboard schoolhouse constructed near the tower
1789 - 1881	Repairs and enlargements of boatmen's cottages (incl. new roofs and verandahs)
1901	Federation
1903	Customs Station transferred to the NSW Government
1904	Customs operation ceases; management transferred to Department of Internal Affairs Tower houses a series of tenants-caretakers until 1957
1950	Tower site reserved and placed under the care of the La Perouse Monuments Trust
1957	Fire destroys much of the tower and results in death of caretakers wife
pre-c.1960	Trust removes most of the fabric at the tower leaving only the stone facade
1961	Restoration commences under the direction of the Dept. of Lands including a reinforced concrete slab roof, including a hanging beam, stone replacements and repointing with cement mortars, Installation of a concrete slab floor. New crenulated turret (battlement) added; windows infilled with stone
2005	Sacrificial plaster skin applied to intercept rising salts

Current Views

Fig. 2 Above: The brass explanatory plaque above the doorway installed as part of the 1961 restoration works by the Lands Department for the La Perouse Monuments Trust. (Photograph by Sheppard, October 2006

Fig. 3 Left: The tower and the present setting. (Photograph by Sheppard, October 2006)

Fig. 4 The west end of the hanging concrete beam under concrete slab roof, showing the exposed and rusting reinforcing rods. (Photograph by Sheppard, October 2006)

Fig. 5 (left) The degraded surfaces of the west facet of the octagon showing the abraded sandstone and the areas of missing and weathered mortar. Note also the concrete sills and infilled window openings. (Photograph by Sheppard, October 2006)
Fig. 6 (right) The current entrance door. The doorway was subject to restoration work in 1961 that probably included provision of a new door although the hinge is likely to be a re-used original fixture. The door is subject to weather damage and attacks by vandals. Note the sacrificial render on the interior up to approx 1 metre. (Photograph by Sheppard, October 2006)

Plans and Drawings

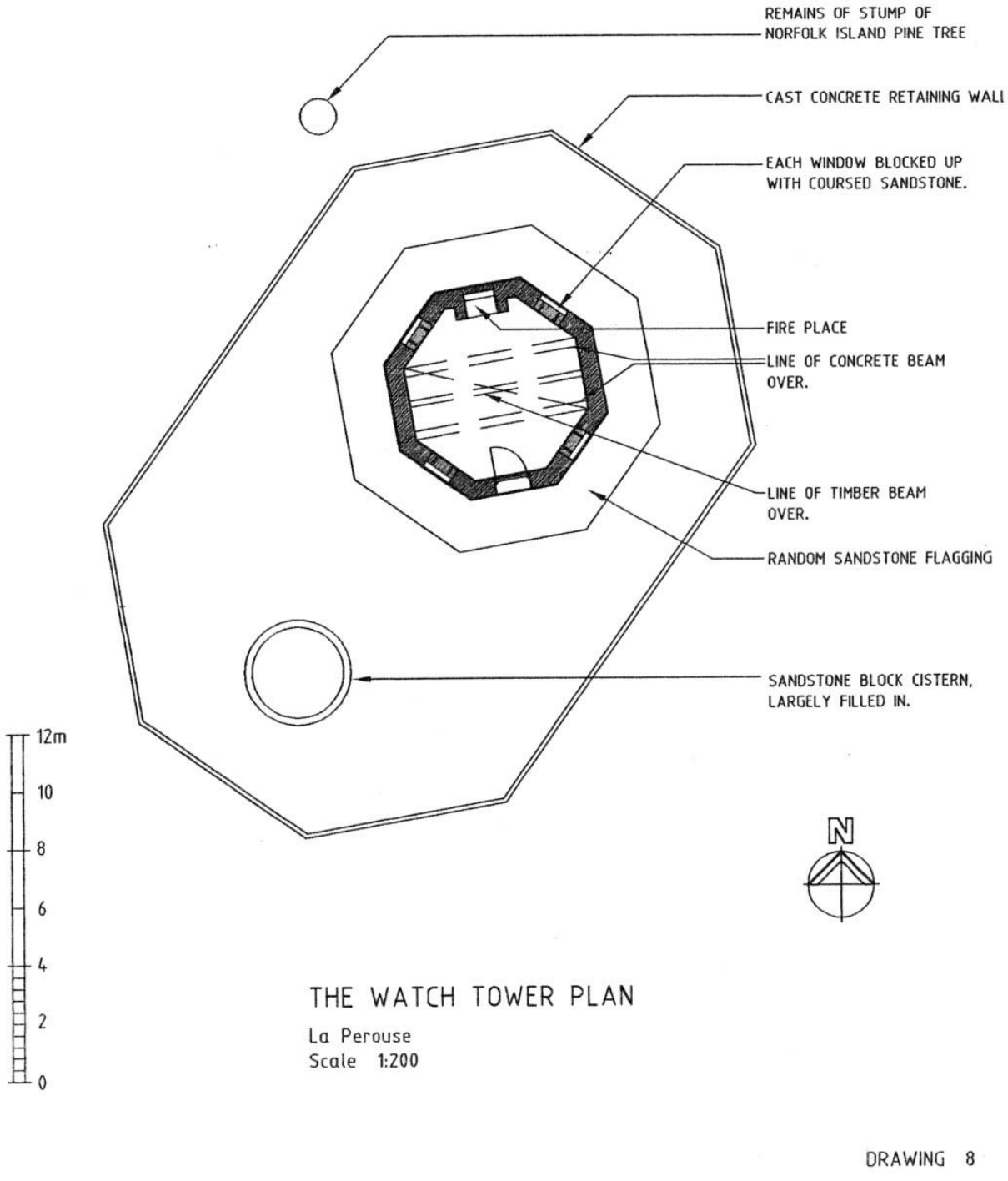


Fig.7 Contemporary plan of Macquarie Watchtower. Reproduced from Cox et al. 2001 Drawing 8.

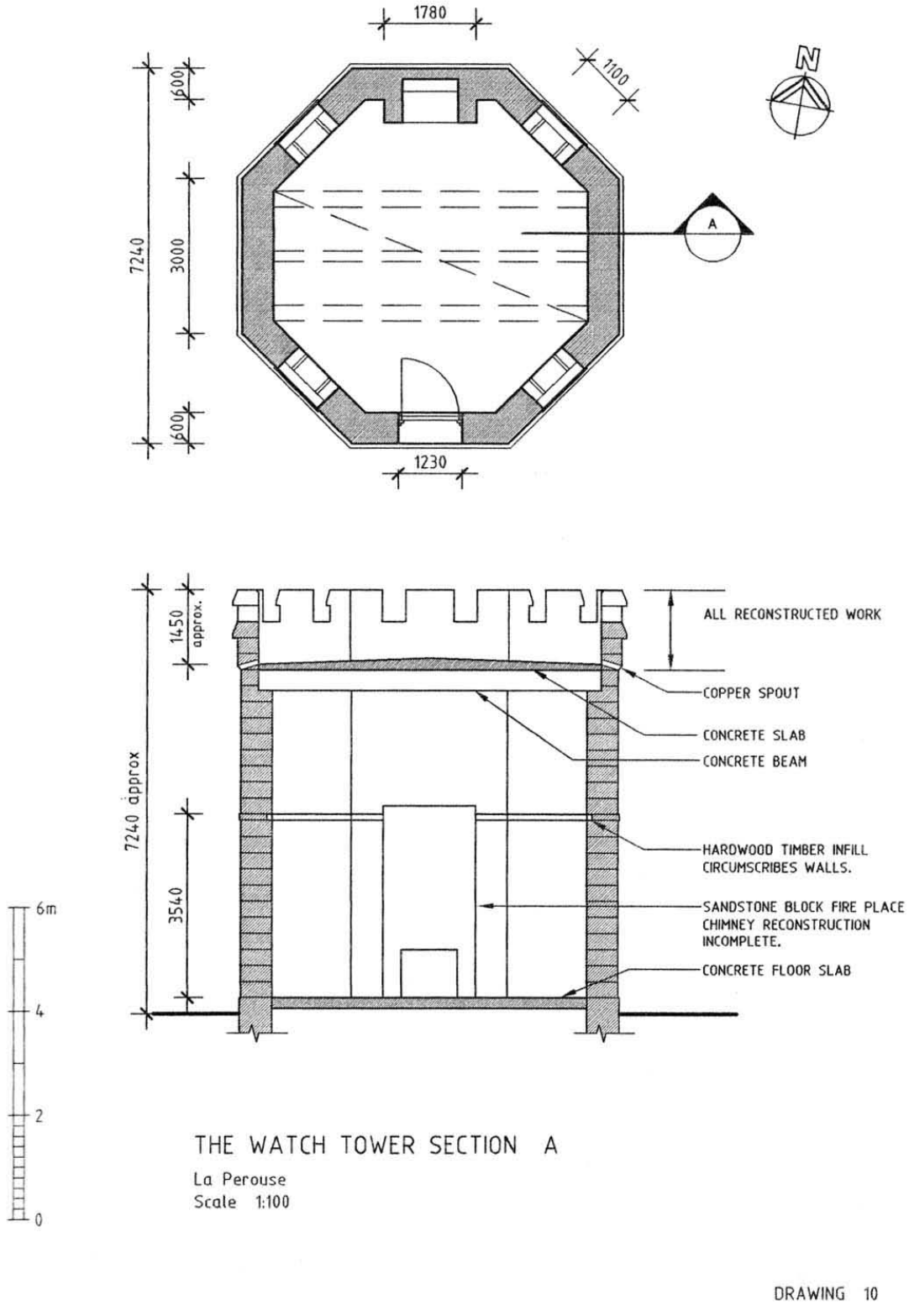


Fig. 8 Reproduced from Cox et al 2001 Drawing 10.

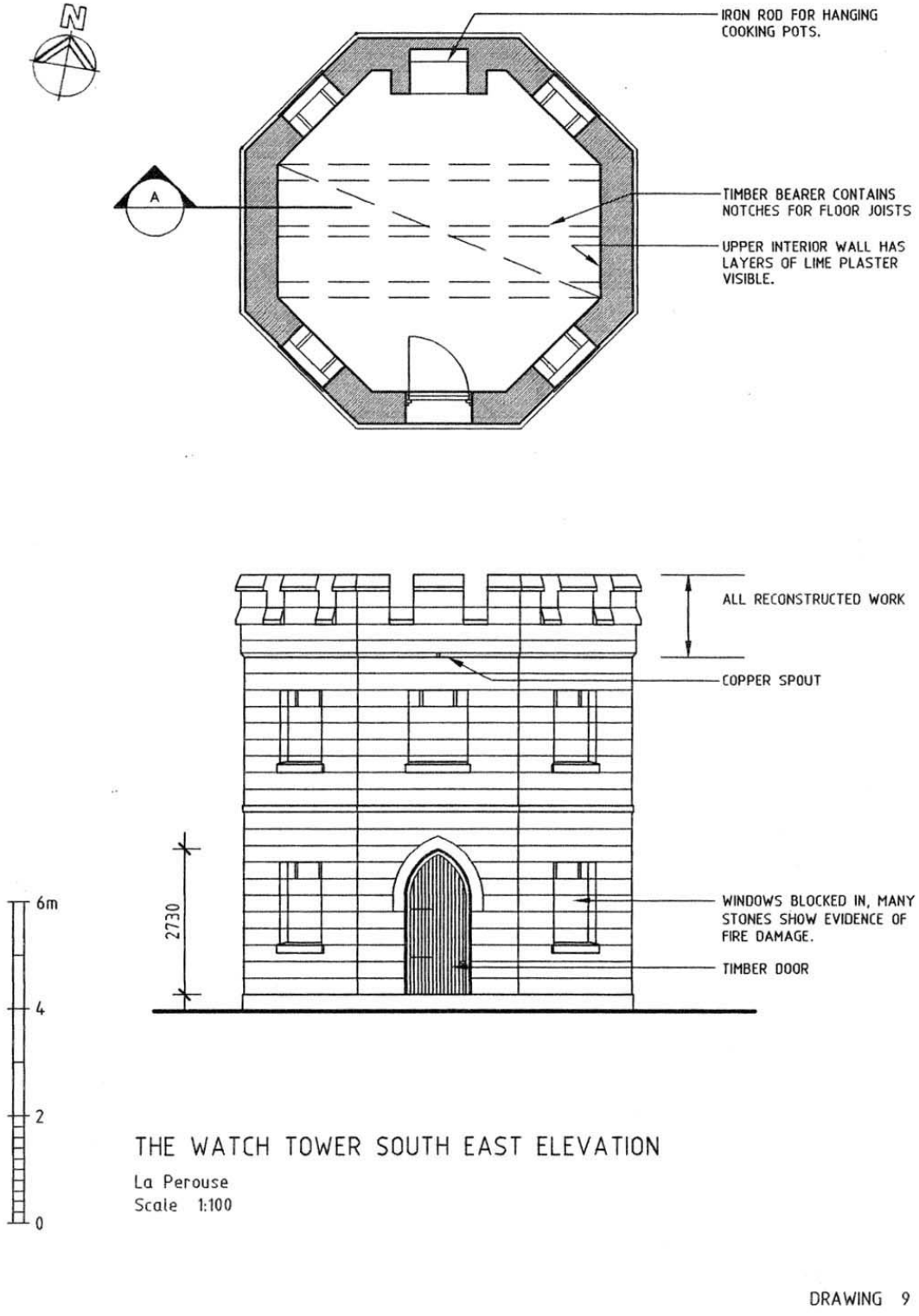


Fig. 9 Reproduced from Cox et al 2001 Drawing 9.

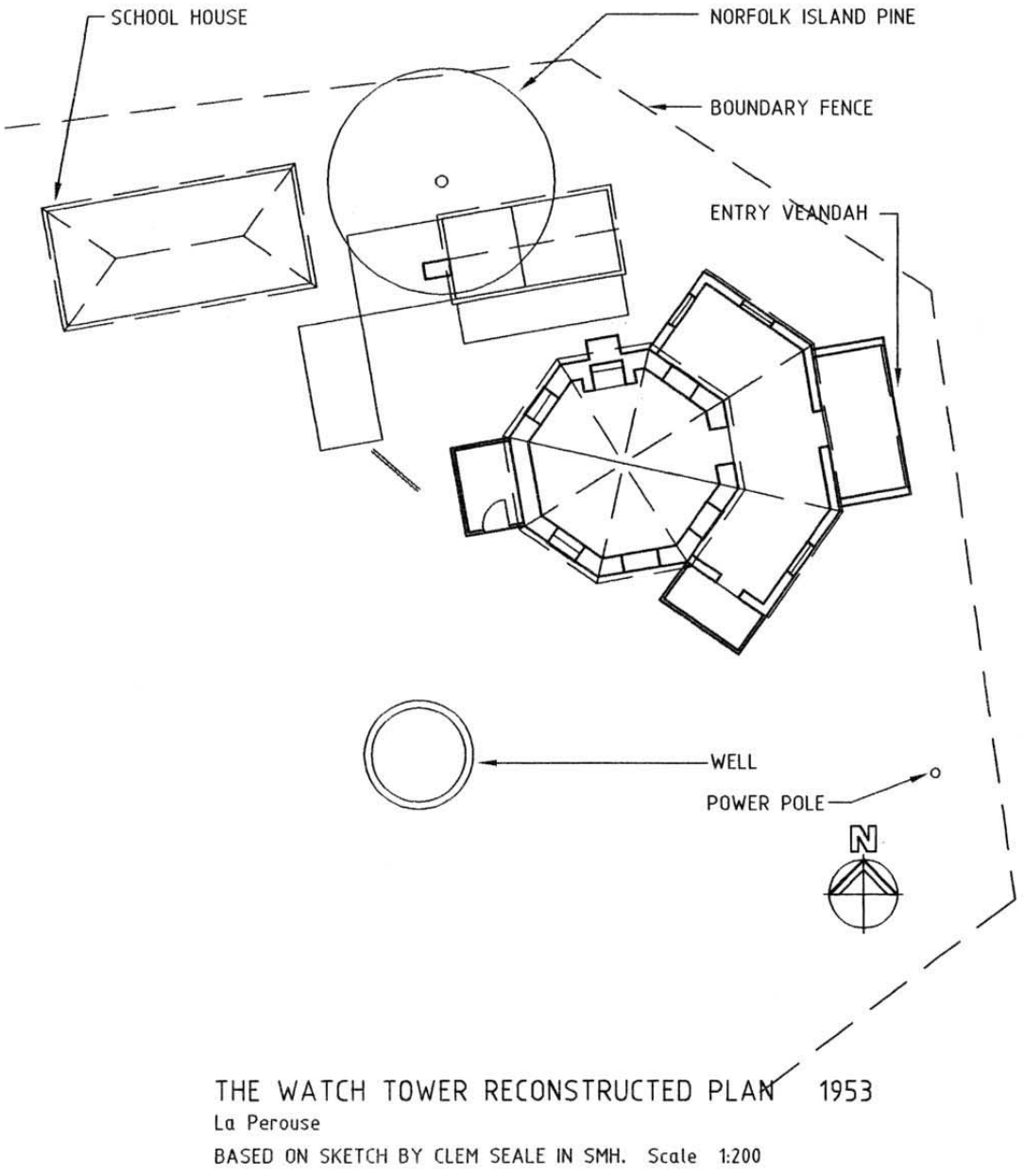


Fig. 10 Reproduced from Cox et al 2001 Drawing 6. Summary of potential archaeological evidence in the vicinity of the watchtower prior to the visible 1960s works comprising the dwarf wall and sandstone paving.

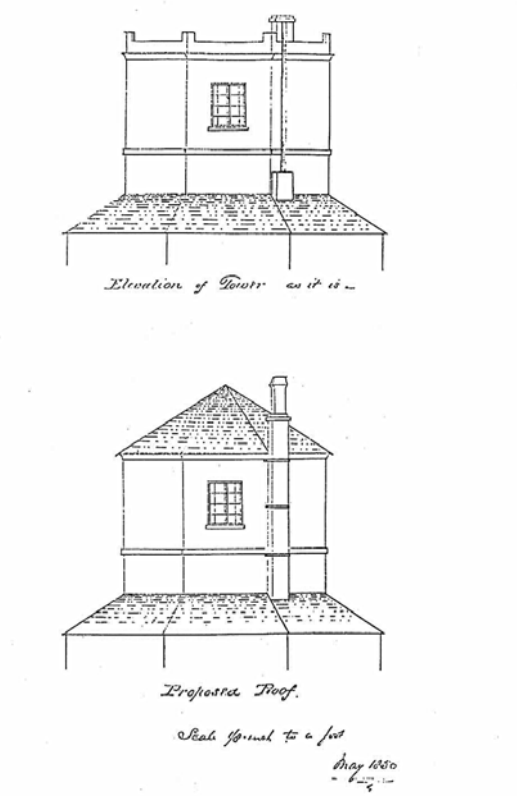


Fig.11 Drawings showing the planned repairs to the tower in may 1850. Reproduced from SRNSW AO 2/653. This image suggests that the crenellations only occurred at the junction of each facet and therefore there were only eight around the building parapet.

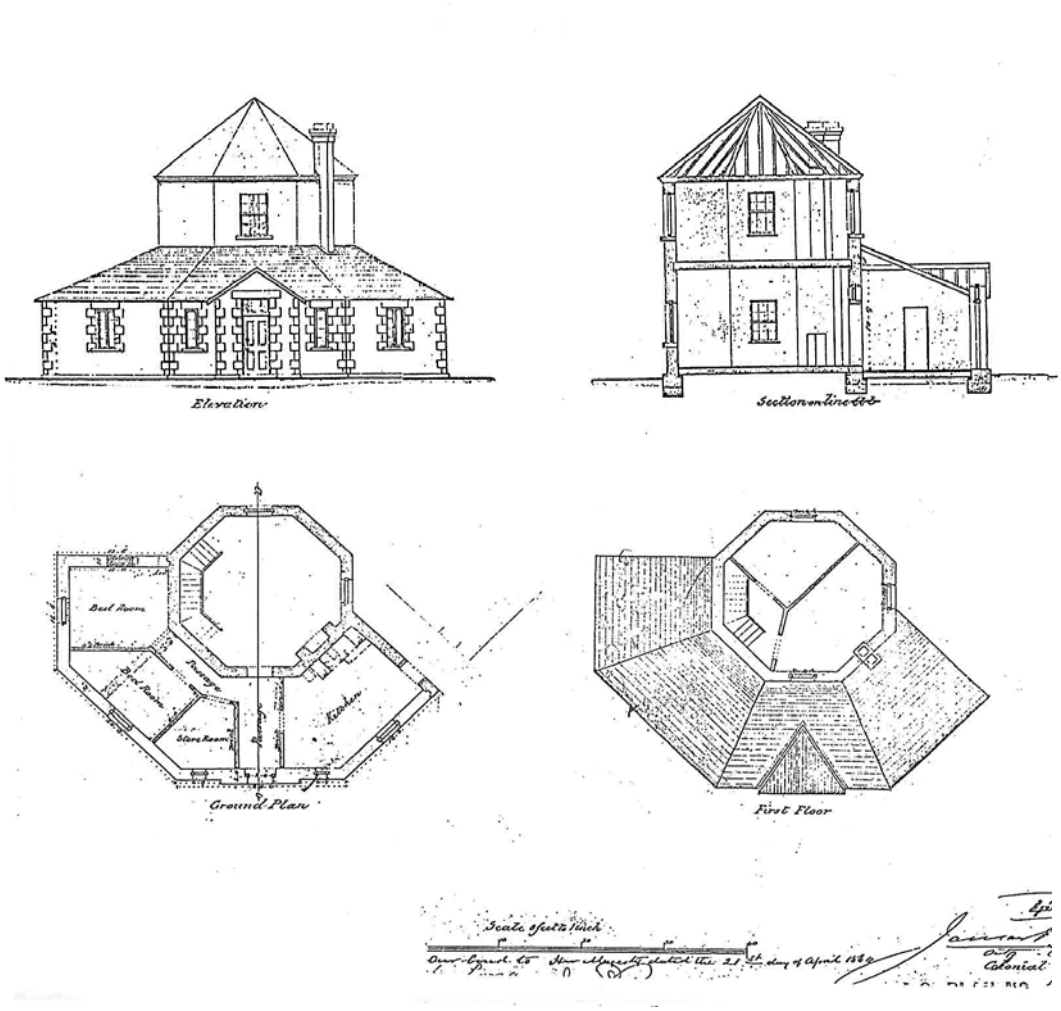


Fig. 12 Proposed alterations and additions to Customs Station Botany 1864. Reproduced from SRNSW AO Plan 1734.

Historical Images

Fig. 13 Watch tower La Perouse, built in Governor Macquarie's time (September 1921). (SL NSW ML GPO 1-17667 &d1 17667)

Fig. 14 Old Watch Tower at La Perouse, New South Wales c.1914-1941 (SLV Image No. ao8813)

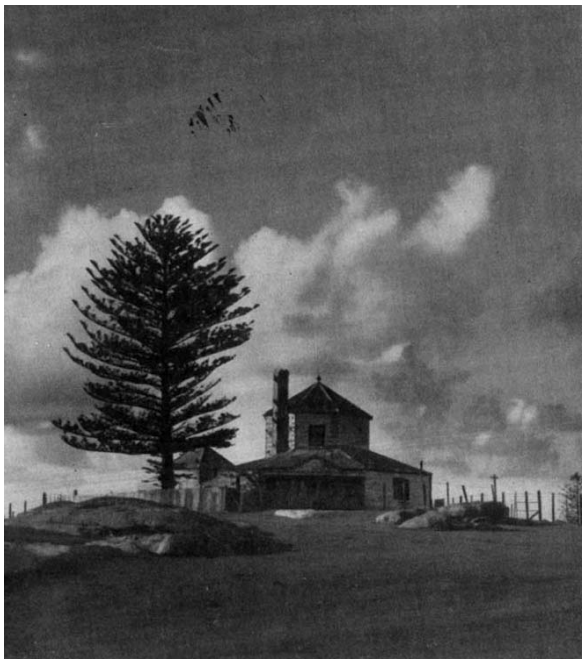


Fig.15 Australia's First Customs House La Perouse c.1938. (SL NSW ML SPF)

Fig. 16 Custom station no date (SLNSW ML SPF)

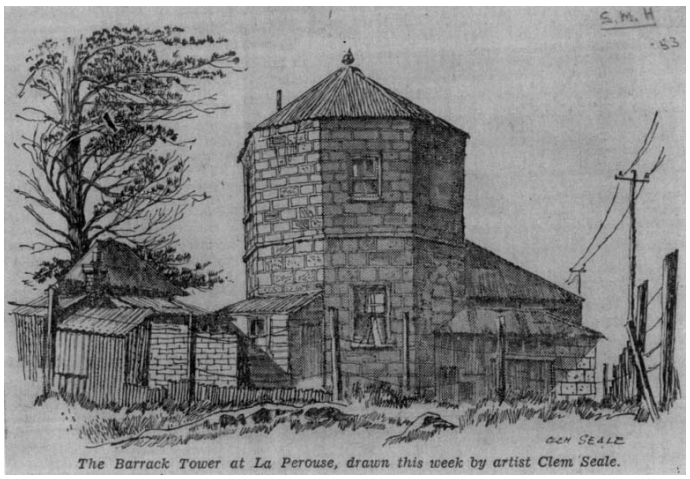


Fig. 17 The Barrack Tower at La Perouse, drawn this week by artist Clem Seale (1935) [Drawing originally published in the Sydney Morning Herald] (SL NSW ML SPF)

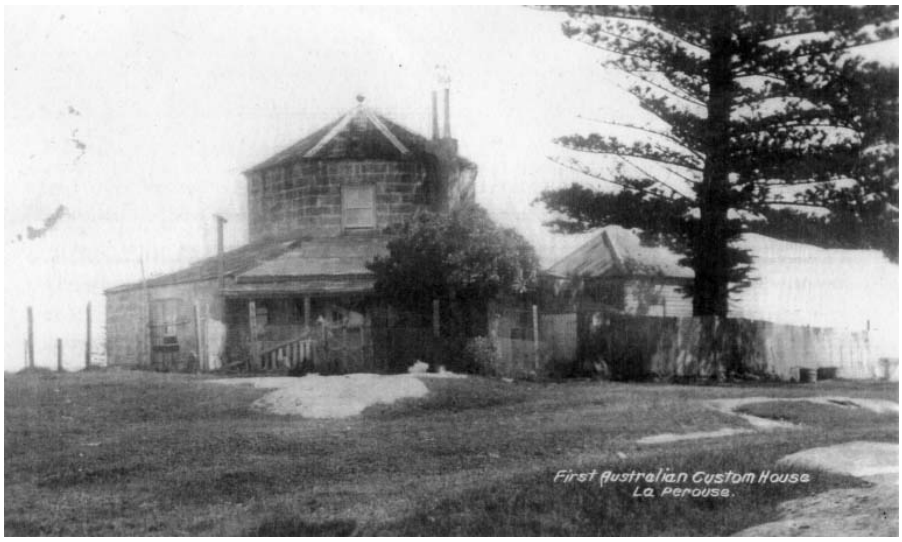


Fig.18 First Australian Customs House, La Perouse. No date (SLNSW ML SPF)

Fig.19 Benjamin Edward Minn's Tower built by Macquarie, La Perouse. No date. (SLNSW ML SPF & Z SVIA/LA PE/1)

Fig. 20 Macquarie Tower, 1956. (SLNSW ML SPF & Neg FM1/3374)

Fig. 21 Benjamin Edward Minn's Tower built by Macquarie, La Perouse. No date. (SLNSW ML SPF & Z SVIA/LA PE/1)

Summary Statement of Significance

The Macquarie Watchtower constructed on the headland c.1820 overlooking Botany Bay is an item of State heritage significance value.

It is the only known coastal watchtower from the penal era specifically constructed for border protection and the prevention of smuggling in Australia. The Macquarie Watchtower is one of only two nineteenth century towers in New South Wales and is thought to be the oldest of the small group of nineteenth century towers in Australia. It became the first Customs outstation in Australia in 1829 under the newly formed Customs Department and operated as a Customs Station until 1903. The Tower 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 tower is the oldest surviving building in Botany Bay. The building is a local landmark and has a long association with photographic and artistic impressions of the La Perouse peninsular. Picturesque additions to the watchtower, destroyed by fire in 1957 are associated with the colonial architect James Barnet.

Name of Place:
Cable Station (La Perouse Museum)

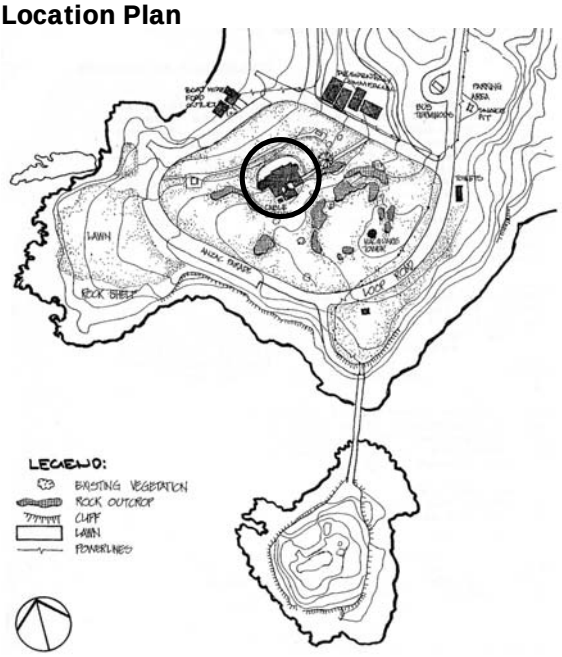
Inventory:
2

Current Use and Associated Items: Currently houses La Perouse Museum, regional ranger offices of BBNP and NPWS caretaker quarters. Nearby items include Battery and Store Rooms, a Water Tank Stand and a Courtyard Area to the rear (south east) of the main building.

Other/Former Uses and Names: Old Cable Station; Telegraph Station; Second Cable Station
1881-2 Built, 1882-c.1913 Operations and accommodation quarters for telegraphic cable service, c.1913-1917 telegraph company staff accommodation quarters, 1920-1933 Coast Hospital Nurses' Home, 1939-1944 Soldier accommodation, 1944-1988 Salvation Army Refuge.

NPWS Item ID SHI ID

Location Plan



Photograph

Fig. 2.1 Cable Station Building

CONDITION: Good Fair Poor Ruinous Site Only **INTEGRITY : High Moderate Low**

Physical Description

The La Perouse Cable Station building is a freestanding two storey rendered brick building designed by the NSW Colonial Architect's office. Associated structures include Battery and Store Rooms, a Water Tank Stand and a Courtyard Area to the rear (south east) of the main building. A sandstone rock shelf to the rear provides the building with a measure of protection from the prevailing southerly winds.

The entry façade of the building faces northwest overlooking Frenchman's Bay and the submarine telegraph cabling's original landfall. It has a single storey timber verandah decorated with cast iron lacework that extends the length of the original building façade. The verandah is reached via three equally spaced iron and sandstone block stairways which correspond to three entry doors to the building. This division of the building into three spatial units in plan possibly reflects the original contractual function and use of the building by two separate companies: EET & CTC and PMG (although no definitive documentary evidence exists) (Danis et al.: 44-5). The central portion has previously been identified as the original Instrument Room used by both organisations (Danis et al: 32) (DPW: 18). This division is also represented in the symmetrical entry façade of the building which is organised into three units with a recessive central pediment (Danis et al: 45). Little detail exists of the original intended uses of the building's rooms and it has been difficult to match the building's room layout to documentary material outlining the companys' requested room requirements (DPW: 18).

The majority of building works associated with the Cable Station took place in the few years following the building's construction namely the years of 1882-1891 reflecting the increased use of the telegraph services at this time. These works included the construction of the Battery and Store Rooms and the two storey asymmetric extensions to both ends of the entry façade. The original single storey wings to the rear of the building were further added to in this time most probably to provide additional accommodation for the increasing staff numbers (Danis et al: 30-1).

Unsympathetic alterations were later undertaken to convert the Battery Room to a shower room and laundry. This was possibly undertaken during the building's use as nurse or soldier accommodation (from 1920 to 1944) or during its reincarnation as a Salvation Army Refuge (from 1944 – 1988). Major renovation work was undertaken in 1988 by the NSW NPWS to coincide with Australia's Bicentennial celebrations and the opening of the Cable Station as the La Perouse Museum. Many features of original building work exist, however, the original hierarchy of decorative joinery and plasterwork finishing has been somewhat obscured by the museum renovation work. The building has had additional renovation work undertaken in 1996. This included the construction of new doorways to the north and south wings from the once separate Instrument Room (Danis et al: 41).

Architectural Qualities and Features

The building complex contains a few construction features of special interest. The Cable Station building itself is an interesting example of an early double storey brick building featuring an intricate wall cavity ventilation system. The adoption of cavity wall construction at the Cable Station relates the building to new approaches to construction in the late nineteenth century. The Australian-developed technological advance had only been commonly employed by a few builders since the early 1880s (Freeman: 188). The external walls of the original building feature decorative circular wall vents containing free spinning fan elements on both internal and external faces. Unfortunately these vents have been subject to fairly heavy-handed painting (and deliberate closure with plaster internally) and many of the movable vent elements have been fixed with thick coatings of paint, some are almost completely painted over.

Cavity wall vents.
Fig. 2.2 (Left): External vent approximately 125mm diameter.

Fig. 2.3 (Right): Vent as seen from interior – note plaster has been used to fill vent openings.

Some joinery work such as that of the storage areas under the original internal staircases is intricate and of a high quality. In the ground floor extension to the east wing, there is a decorative timber screen which may be a later c.1920-1940s insertion. The screen suggests that the room functioned as a meeting area/church hall (and thus as a form of altar screen) during the occupation of the Cable Station.

Fig. 2.4 and 2.5 Cable Station Interior – Timber screen and detail.

Chronology of known works

21 March 1876	Submarine cable system linking New Zealand and Australia opened for use ahead of schedule. Australian submarine landfall at Frenchman's Bay, La Perouse headland (NSW PWD: 10).
4 January 1881	Government called for tenders for construction of the Cable Station Building.
1882	Cable Station Building completed at the total cost of 5452 pounds 2 shillings 6 pence.
1883	Urgent request for construction of separate Battery Room and Store Room received by the Secretary of Public Works Department (Danis et al: 30).
1884	Minor works similarly requested (Danis et al: 30).
1885	Probable construction year for Battery Room and Store Room buildings to the rear of the Cable Station building.
1890	Duplication of telegraph cables required due to increasing telegraphic traffic. (NSW PWD: 26).
1890	More works tendered (completed 1891) appear to include asymmetric extensions to both front wings. (Danis et al: 30-1).
1893	Top House built. (Danis et al: 31).
1895	Partial renewal/replacement of submarine cabling (NSW PWD: 27).
1899	EEA & CTC acquire crown land on which Yarra Bay House is to be built. (NSW PWD: 24).
c.1903	Yarra Bay House construction completed (NSW PWD: 25).
c.1913	By 1913 (at least) Yarra Bay House was accommodating the EEA & CTC offices and telegraph operating rooms, and provided the Superintendent's quarters on the first floor. The submarine cables had been taken up at the shore end and partially re-laid to landfall at Yarra Point. The Cable Station and 'Top House' become staff accommodation quarters, the original Instrument Room being converted into a billiard room (NSW PWD: 25).
10 February 1916	EEA & CTC signed an agreement with PMG to move the submarine telegraphic cable landfall to Bondi. The Station had become redundant due to advances in telegraphic signal transferral. The expense of a Cable Station could finally be avoided. As government owned the site (excluding Yarra Bay House) it could be reused immediately (NSW PWD: 27).
8 April 1917	Cable station telegraphic operations cease (NSW PWD: 27).
1918	Possibly vacant (NSW PWD: 29).
1919	Possibly used as offices for N.S.W. Lands Department (NSW PWD: 29).
1920-1933 (at least)	Cable Station functions as a Nurses Home for nurses working at the Coast Hospital (later Prince Henry Hospital) (NSW PWD: 29).
1924	EEA & CTC sells Yarra Bay House and grounds.
1937	La Perouse headland area dedicated as a 'reserve for monuments'. Trustees appointed (NSW PWD: 3).
September 1939? - 1944	Cable Station employed as soldier accommodation for newly enlisted and mobilising forces including Company 'B' of the 2nd Garrison Battalion.
October 1944 – 13 January 1988	The Station building is leased and occupied by the Salvation Army as a refuge for women and children (NSW PWD: 29) and (Danis et al: 5, 38).
1967	Precinct gazetted as 'La Perouse Monument Historic Site' and classified 'Historic Zone' under NSW NPWS control (NSW PWD: 3).
1974	National Trust of Australia (NSW) listed as 'classified' the landmarks of La Perouse Monument Historic Site under 'Botany Bay Entrance' (NSW PWD: 4).
January 1988	NSW Public Works Dept. commissioned a Conservation Plan for Cable Station – funding for conservation works allocated by the Australian Bicentennial Authority (NSW PWD: i).
23 February 1988	La Perouse Museum opened by the then Minister for Arts Bob Carr.
1988	Partial removal of some interior walls, addition of staircase, provision of public toilets, painting and decorative work. Some floor levels altered, damaged flooring replaced. Air conditioning system (plant and equipment) installed together with a security system. Battery Room extensively altered with new ceilings and floor and walls.

1996	New doorways from Instrument Room to north and south wings. Skylight in Instrument Room refurbished and interior repainted. Occuli windows in Instrument Room reestablished. Exterior repainted, rotten timber repaired, guttering and down piping replaced. Resurfacing and grading of Museum driveway.
2005-6	Installation of a new split-system air conditioning system. Installation of a back-to-base wireless fire alarm system.

Note: EEA & CTC - Eastern Extension Australasia and China Telegraph Company
PMG - Postmaster General

Current Views

Fig. 2.6 View of Cable Station building complex from the southeast.

Fig. 2.7 (below): View of Cable Station building complex from the west.

Fig. 2.8 (left): View of Cable Station building complex from the southwest.

Sequential Development

Stage 0 – Prior to Construction (1876 -1881)

Fig. 2.9 First telegraph cable officers' camp. February 1876.

SLNSW ML GPO 1 - 05257

Stage 1 - As Constructed (1881-2)

Fig. 2.10 Ground and first floor plans and elevation of the Cable Station building c.1882.
(Presented in NSW PWD 1987: 17)

Sequential Development

Stage 1 - As Constructed (1881-2)

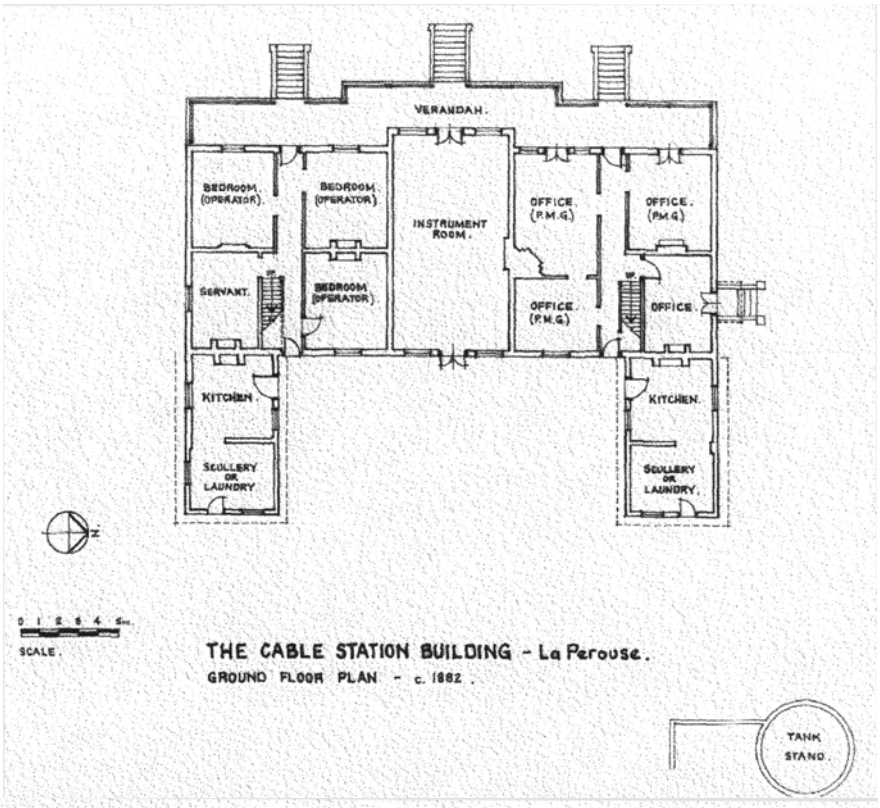


Fig. 2.9 Ground floor plan of Cable Station building as constructed (from Danis et al. : 162).

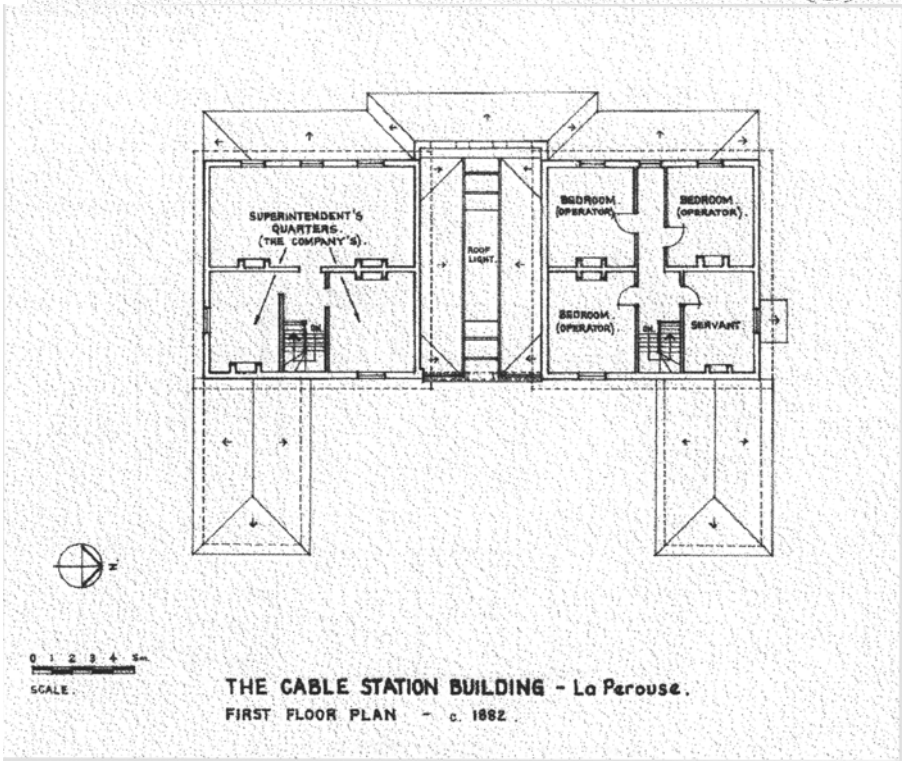


Fig. 2.10 First floor plan of Cable Station building as constructed (from Danis et al. : 163).

Sequential Development

Stage 2 - Expansion (1884-6)

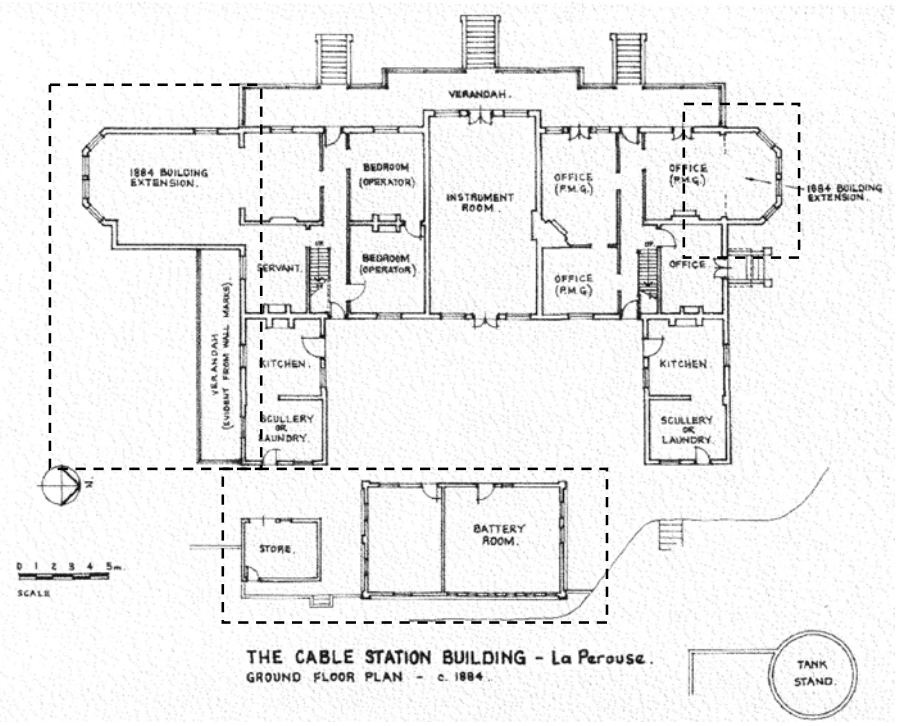


Fig. 2.11 Ground floor plan of Cable Station building following early alterations (from Danis et al. : 164).

Alterations include two storey extensions to both ends of the entry façade and a walkway verandah to the south façade of the Cable Station building. Store Room and Battery Room have been completed.

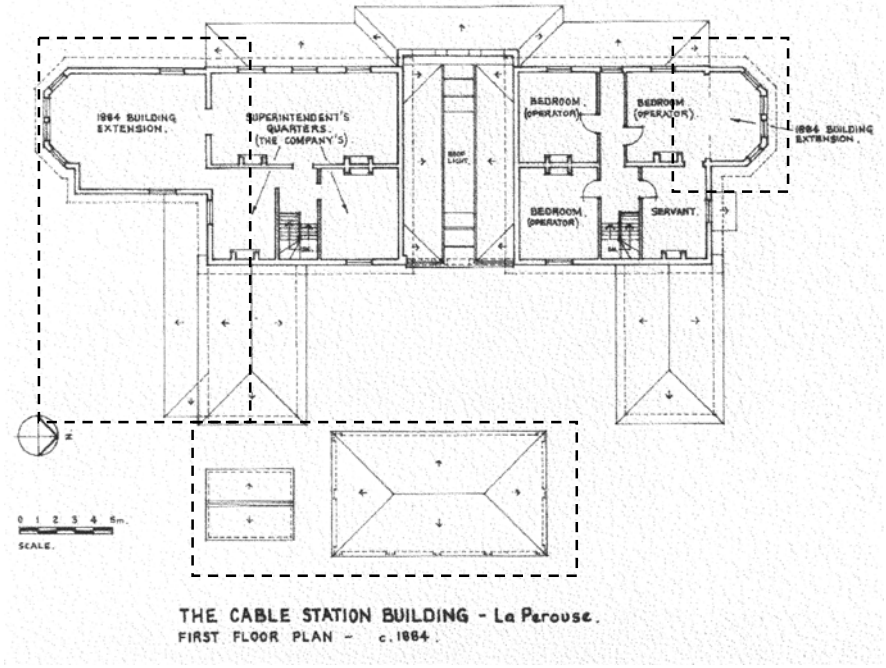


Fig. 2.12 First floor plan of Cable Station building following early additions (from Danis et al. : 165).

Sequential Development

Stage 3 – Further Additions (1890)

Fig. 2.14 Image of Cable Station c.1914-1944.

(SLV Image Number: a08812)

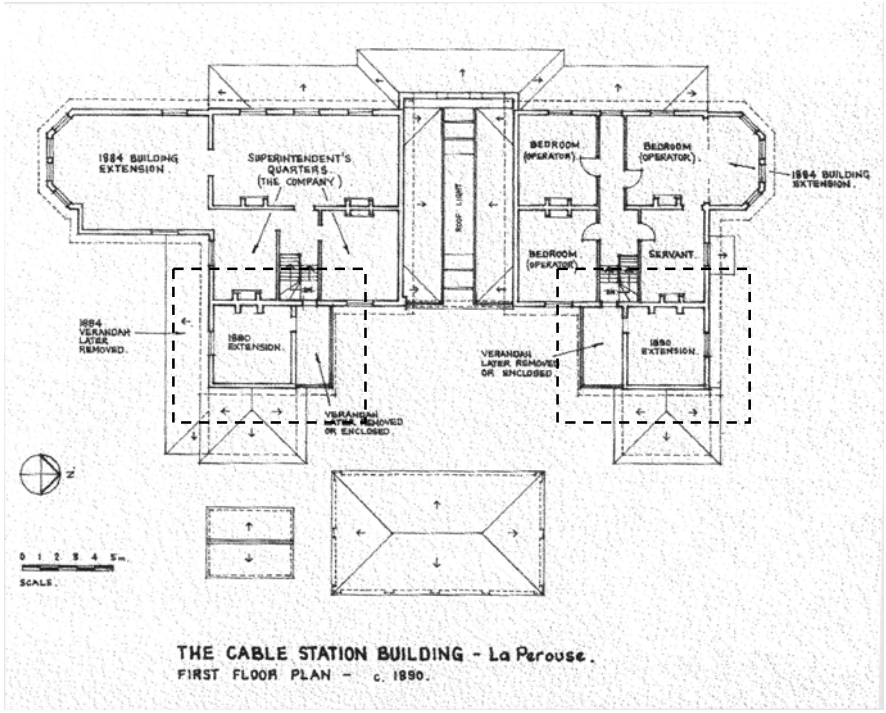


Fig. 2.13 First floor plan of Cable Station building following further additions in 1890 (from Danis et al. : 166).

Alterations include the addition of a corridor and room to the first floor of both wings of the building.

Sequential Development

Stage 4 – Present state (2001-7)

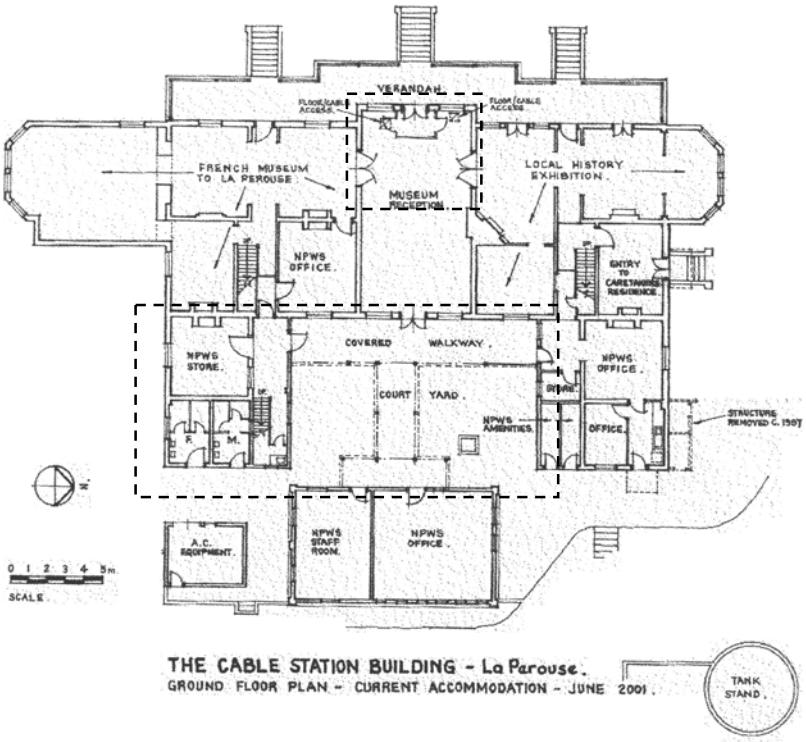


Fig. 2.15 Ground floor plan of Cable Station building in 2001 (from Danis et al. : 167).

Alterations include: Construction of the covered walkway in the Courtyard area (date unknown). Building converted to modern museum and NPWS offices and caretaker accommodation which involved the construction of public toilets, internal fitout works. Also included the creation of new doorway openings to the Instrument Room from both building wings.

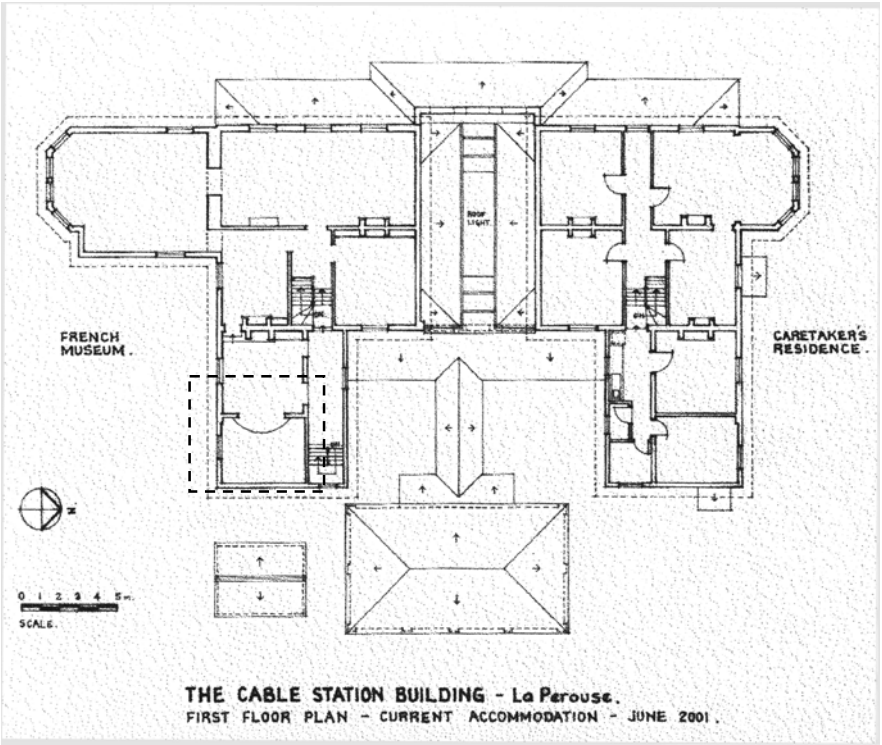


Fig. 2.16 First floor plan of Cable Station building in 2001 (from Danis et al. : 167).

Alterations consist of internal fitout works throughout floor.

Item name: Cable Station Building	**Inventory No.** 2

Summary Statement of Significance

The Sydney/New Zealand Submarine Cable laid in 1876 twenty five years after the laying of the first successful submarine cable in the world, used technology that was well understood. Its primary significance was that the link with New Zealand completed the network linking all the main British colonies. 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 landfall of the cable route is now only represented by archaeological evidence of local significance value.

The 1882 La Perouse Cable Station building is an item of State heritage significance. It is the only substantially intact, surviving cable station building in New South Wales and is a rare Cable Station building in Australia. It is associated with the later stages of the time of great engineering enterprise, when submarine cables were transforming communications across the globe and giving rise to unprecedented levels of internationalism. Within the international set of Cable Station buildings the La Perouse complex is one of the substantial and impressive public buildings in a set which includes many buildings of domestic scale and architectural style. Designed in the Colonial Architect's Office under the colonial architect James Barnett, 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. Despite the early adoption of the modern philosophy applied to the internal arrangement of spaces, the external stylistic influences were Victorian including the Victorian Regency style of each wing with the overall composition being consciously unusual with the unexpected inclusion of a lower pedimented central room which suggestive of the application of Mannerist influences, which is a style Barnett is known to have taken an interest in. Re-used for a number of accommodation functions including as soldier's accommodation, a Nurses Home and for some 43 years as a Salvation Army refuge for women and children and most recently as a local museum, and a repository for modern French ship's plaques, the building has a high level of social attachment. It is also a significant feature in the headland landscape with a strong sense of place.

Name of Place:
Battery Room

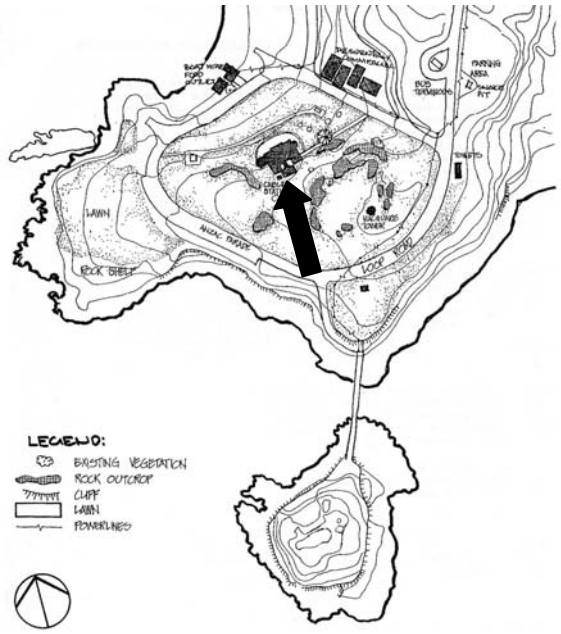
Inventory:
3

Current Use and Associated Items: North room used as a storage and meeting room, southern room as kitchen and store for visiting school groups and staff.

Other/Former Uses and Names: Former names unknown. Originally housed batteries and mechanical equipment required during telegraph cable service operations. Later adapted into two rooms (date unknown): the north used as shower room, the south as a laundry.

NPWS Item ID SHI ID

Location Plan



Photograph

Figs. 3.1 & 2 Views of the Battery Room.

CONDITION: Good Fair Poor Ruinous Site Only **INTEGRITY : High Moderate Low**

Physical Description

The Battery Room is single storey brick building constructed as an ancillary structure to the La Perouse Cable Station building c.1885. Very little information is available regarding its construction. The building is aligned squarely to the Station building and creates a sheltered courtyard area to the east façade (rear) of the Station building by acting as a windbreak. The building is rectilinear in plan and currently consists of two rooms separated by a single brick partition wall, which appears to be a later subdivision of a simple single-roomed building (Danis et al: 125). The cavity walls are strengthened with engaged piers to support the roof structure of the large open space room.

The bricks are a very light sand colour and are very weathered and eroded on the eastern façade due to wind abrasion. The mortar has been eroded to an even greater degree. The bricks look similar to the bricks used in the construction of the Flowers Ward buildings at the Coast Hospital at Little Bay, which were built contemporaneously. The Coast Hospital bricks were produced locally in Sydney at the Government Brickworks and there is some doubt as to their quality (often light sand colour indicating under firing during production and subsequent weak and soft bricks that weathered poorly) (Freeland: 188). It is possible that the Battery Room was constructed from bricks sourced from the same producer. The bricks have an unusual bullet shaped frog, which may provide clues for further identification (pers. comm. Blaxland: 2007). Some deteriorated bricks have been replaced with modern bricks.

Current Views

Fig. 3.3 (left) A later alteration opening in the north wall of the Battery Room has resulted in the cutting out of original engaged brick pier.

Fig. 3.4 (right) Original double hung window.

Fig. 3.5 (left) Deteriorated storm water drain to the east (rear) of the Battery Room.

Fig. 3.6 (right) Deteriorated brick wall of Battery Room displaying the loss of mortar and crumbly nature of bricks.

Originally, the roof structure was exposed internally and made primarily of large section oregon timbers. The painted rafters are exposed below painted lining boards that extend beyond the walls to serve as soffit boarding. The roof features king post trusses with steel vertical chords. Currently a flat painted asbestos cement sheet ceiling conceals the original roof structure. The walls are currently sheeted (on battens) with asbestos cement sheeting and in some locations have been insensitively laid up and above the original windows' sills.

The northern room has a carpeted raised concrete slab floor with evidence of capped off toilet sewerage and shower floor waste connections. It was used as the shower block while the room to the south functioned as a laundry (pers. comm. Blaxland: 2007) (Danis et al.: 39). The southern room has a tiled floor.

The Battery Room has a variety of window and door openings that have been altered and relocated during the building's use. There are original c.1880s pairs of double hung windows on the south façade. The windows have fine timber glazing bars, unfortunately they have been painted heavily over the years and are subject to partial concealment by wall sheeting as mentioned above.

Some new windows to the north and east façades of the Battery Room have been installed during the building's conversion to a shower block and new masonry openings have been created, some resulting in the original engaged

brick piers being cut horizontally. The northern door to the Battery Room on the western facade is a four-panel flush moulded solid core timber door with a three-pane fanlight. The other door is a simple solid core flush-faced door. Both have slate thresholds.

To the east (rear) of the building is a spoon drain constructed from half round terracotta piping installed in 1987 (pers. comm. Blaxland: 2007). This drain appears to have been laid to assist in the removal of rainwater flowing towards the Battery Room from the sandstone rocky outcrop and slope. The drain is in poor condition as the piping sections are disconnected due to earth settlement and grass growth and do not lie on an even fall to a drain inlet. It also collects building rubble, loose earth and litter.

Fig. 3.7 Battery Room bricks with bullet-shaped frog.

Plans and Drawings

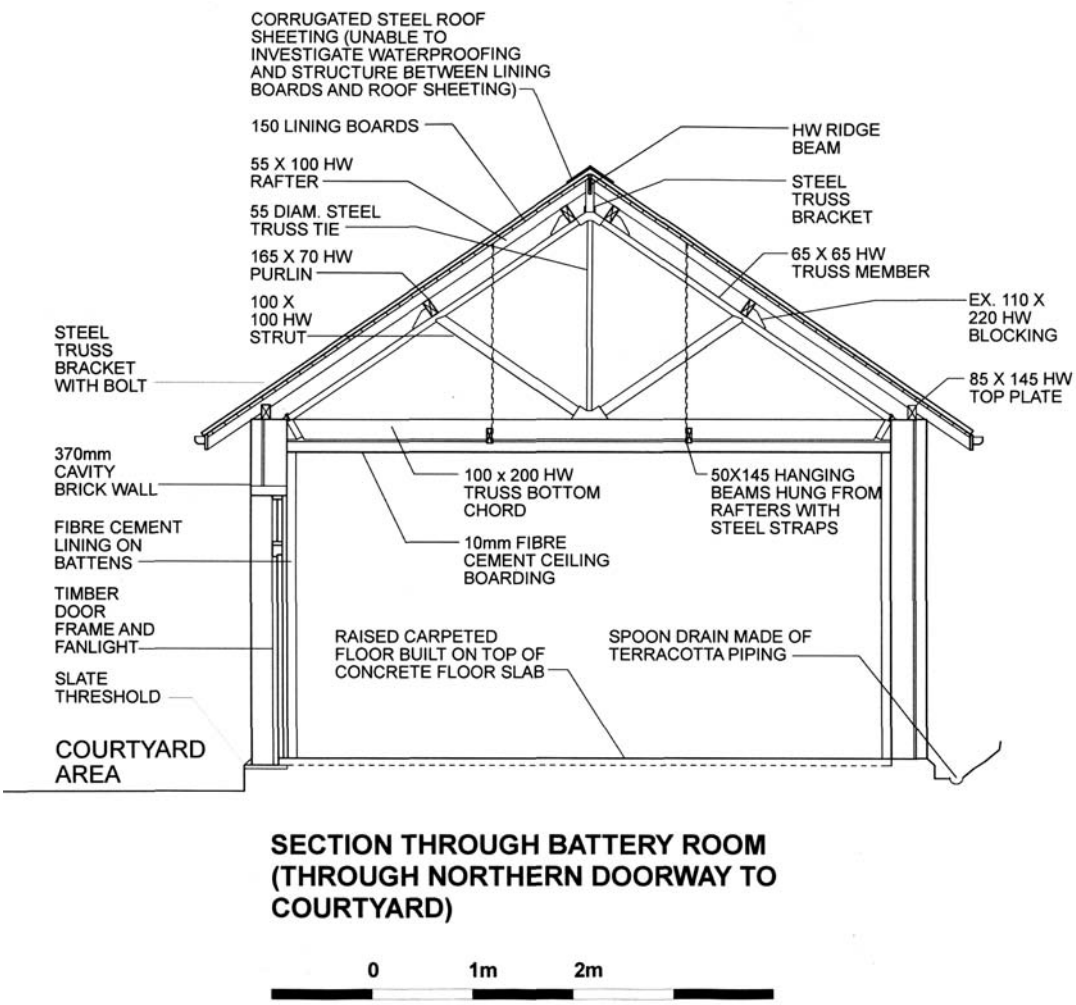


Fig. 3.8 Section through Battery Room looking north. K Bohdanowicz 2007

Summary Statement of Significance

The significance value of the Battery Room is as a component of the Cable Station building complex which is assessed as being an item of State significance value. The Battery Room has historical associations with the former operations of the complex as a Cable Station and as residential accommodation. The Battery Room building has been compromised by unsympathetic alterations for re-use as a shower and bathroom facility. However, it retains Oregon roof trusses which are aesthetically pleasing and the building forms the southern wall of the Cable Station building complex.

Name of Place:
Store Room

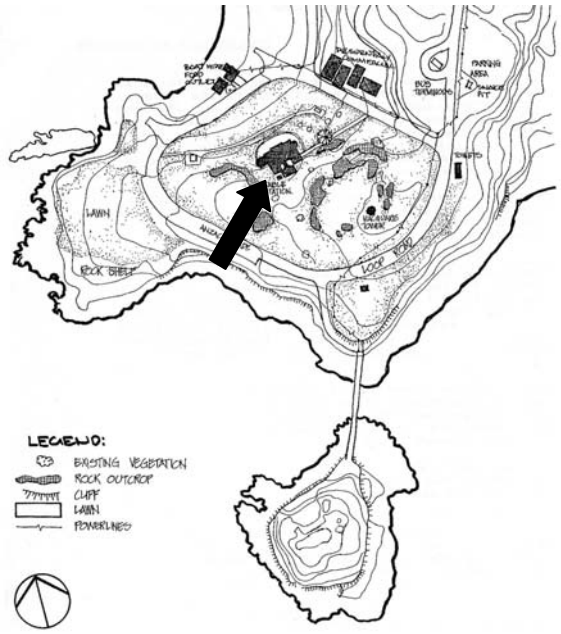
Inventory:
4

Current Use and Associated Items: Currently houses the La Perouse Museum's air conditioning plant.

Other/Former Uses and Names: Boiler Room. Previously housed Cable station's 'donkey engine' or boiler, and a toilet in the southern end.

NPWS Item ID **SHI ID**

Location Plan



Photograph

Fig. 4.1 View of Store Room from courtyard.

CONDITION: Good Fair Poor Ruinous Site Only **INTEGRITY : High Moderate Low**

Physical Description

The building known as the Store Room is a simple, rectilinear building built in alignment with both the Cable Station building and the Battery Room, to the south of the Battery Room and was probably built c.1885-6.

The building is built of mid brown double brick walls. It has a timber framed, corrugated steel gable roof with the ridge running north to south. The roofing is beginning to rust and will require replacement soon. It has a painted concrete floor, with a raised concrete platform in the northern end and a timber threshold at the doorway. The building has undergone significant alterations and now accommodates the Cable Station's air conditioning plant. The west façade is almost entirely constructed of an iron mesh screen and a metal screen pair of doors. The roof has a metal screen air vent installed, as does the east facade. All screens are corroded.

Similarly to the Battery room, the Store Room is treated for stormwater runoff from the sandstone outcrop to its east. A low brick retaining wall has been built approximately a metre away from the building's eastern wall to act as a drainage buffer. It serves to reduce the amount of moisture penetrating the walls but the accumulation of rubble, loose earth and lawn clippings in the drain reduce its effectiveness.

Current Views

Fig. 4. 2 View of Store Room displaying the mesh openings on the roof and east facade.

Fig. 4.3 South façade of Store Room. Bargeboards and wall require painting.

Fig. 4.4 (left) Retaining wall and steps to the rear of the Store Room. Rubbish has a tendency to collect in this area and block the storm water drains.

Fig. 4.5 (right). West façade of Store Room with mesh screens to air-conditioning condenser unit. The metal screens are corroded and require replacement.

Fig. 4.6 (left). Store Room roof with mesh opening.

Item name: Store Room	**Inventory No.** 4

Summary Statement of Significance

The significance value of the Store Room is as a component of the Cable Station Building complex which is assessed as being an item of State significance value. The Store Room building is associated with the former operation of the complex as a Cable Station. The building does not reflect its original use housing the power supply for the complex in any special physical or architectural features. The Store Room is a component of the rear wall of the Cable Station complex and is a simple utilitarian building.

Name of Place:
Courtyard

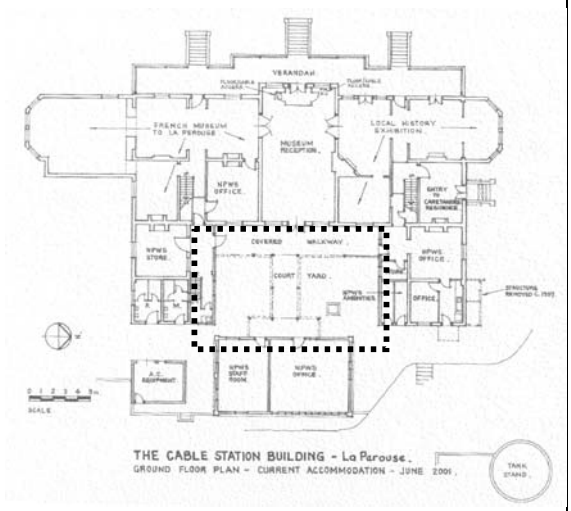
Inventory:
5

Current Use and Associated Items: Currently a service space and walkway area between Museum, public toilets, Ranger offices, Battery Room and Store Room.

Other/Former Uses and Names: N/A

NPWS Item ID SHI ID

Location Plan



Photograph

Fig. 5.1 Covered walkway in courtyard area.

CONDITION: Good Fair Poor Ruinous Site Only **INTEGRITY : High Moderate Low**

Physical Description

The Courtyard describes the area bounded by the Battery and Store Rooms to the east (rear) of the Cable Station Building. The area is sheltered from the wind by the location of these utilitarian constructions and was further improved for daily use by the addition of a timber framed covered walkway. The covered walkway links the Cable Station building to the Battery Room with a simple timber and corrugated steel, gable-roofed walkway. The underside of the roof consists of timber lining boards on exposed painted rafters.

A well, with a reinforced concrete surround is located in the north east corner of the courtyard. The well is currently covered with a steel sheet cover with a steel ring handle. There are also two other covered pits within the courtyard area. These are also covered with steel sheet covers and are level with the ground surface. The pits are identical in size and symmetrically located on each side of the central axis of the building.

The courtyard has an uneven ground surface of concrete slabs and brick paving. During heavy rainwater pools at the entry way to the Instrument Room and public toilets. This can be attributed to inadequate surface grading and insufficient drainage of rainwater away from the building. Water has also eroded the surface of the paving in areas, which makes the area unsafe for visitors.

A painted 2100mm high timber fence and gate secure the courtyard. The fence continues between the Battery Room and Store Room and the Store Room and the Cable Station building. It was constructed in the last decade as a measure to protect the Cable Station building and surrounds from vandalism.

Current Views

Fig. 5.2 (left) Location of the gutter spreader from the Instrument Room roof.

Fig. 5.3 (right) Detail image of gutter spreader to be replaced with spreader directing water down roof slope.

Fig. 5.4 (left) Unpainted wall behind fire hose reel mounting. Note white PVC down piping.

Fig. 5.6 (right) Gate and fence to Museum driveway. Courtyard ground surface to be graded to fall to this corner of the Courtyard area.

Fig. 5.7 (left) Painted concrete well with steel sheet cover.

Fig. 5.8 (right) One of the two in-ground pits in the Courtyard.

Fig. 5.10 Uneven and deteriorated ground surface in the courtyard area.

Plans and Drawings

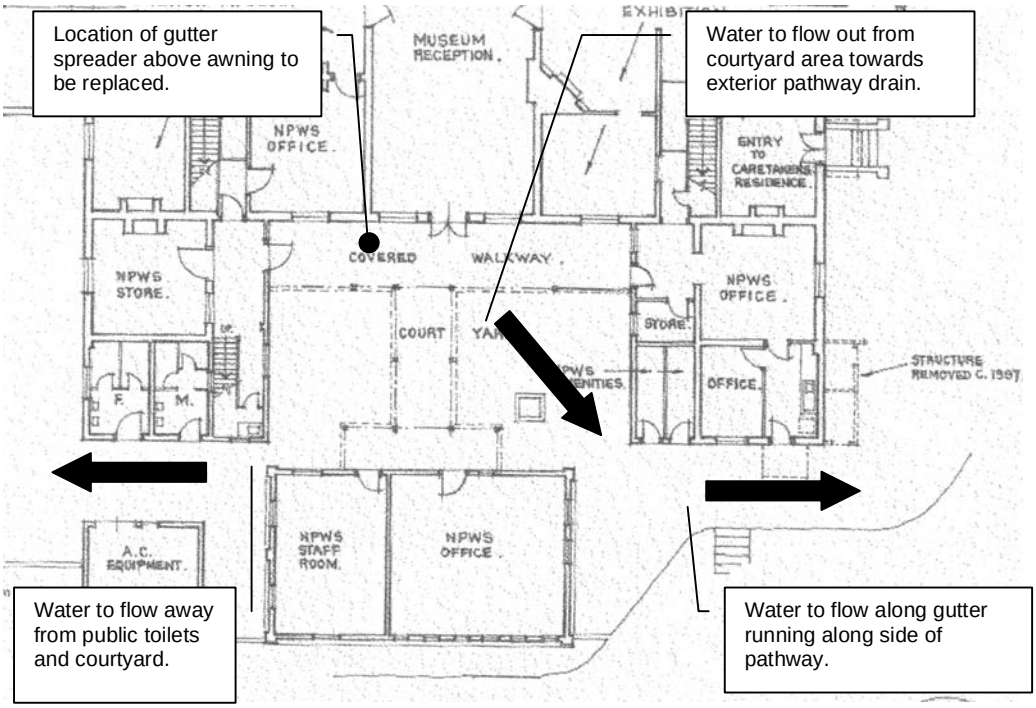


Fig. 5.11 Plan of Cable Station Courtyard area showing the recommended flow of rainwater out of the courtyard area and into the storm water drainage system. (Image based on plans prepared by Danis et al. : 167).

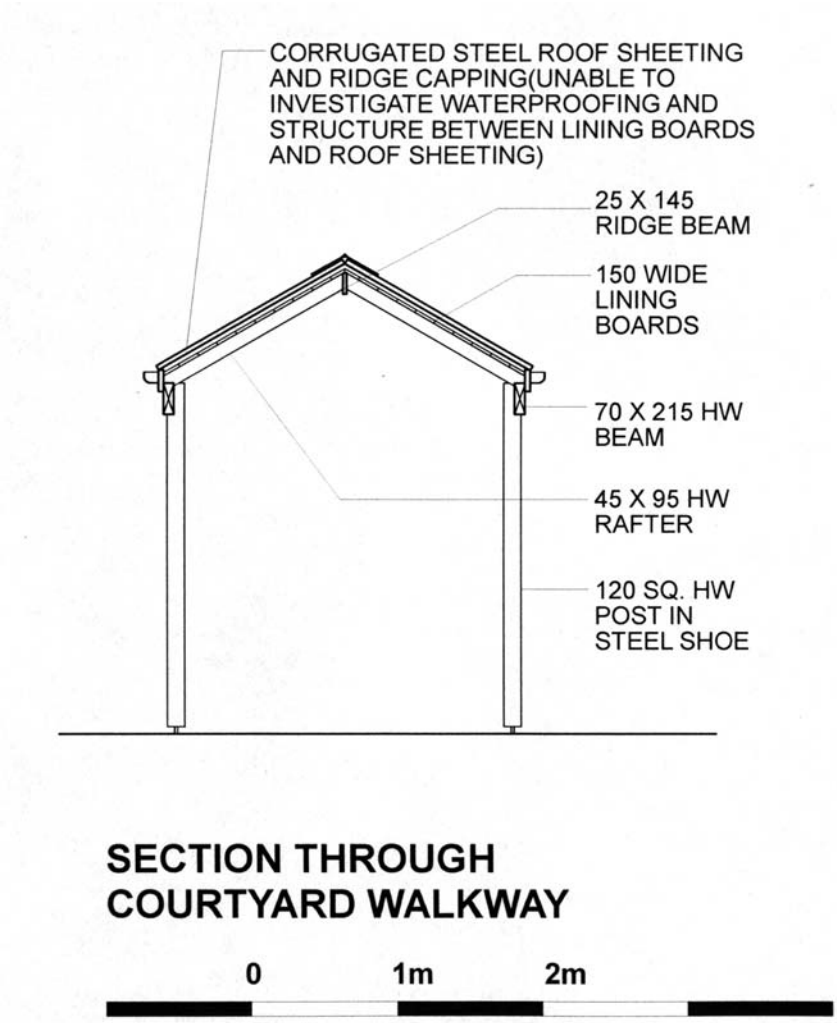


Fig. 5.12 Section through Courtyard walkway structure. K Bohdanowicz 2007.

Summary Statement of Significance

The significance value of the Courtyard is as a component of the Cable Station building complex which is assessed as being an item of State significance value. The Courtyard has historical associations with the former operations of the complex as a Cable Station and as residential accommodation. The courtyard is an attractive feature of the arrangement of the building complex and the covered walkway provides a physical link between the Cable Station wings and the main buildings of the complex

Name of Place:
La Perouse Monument

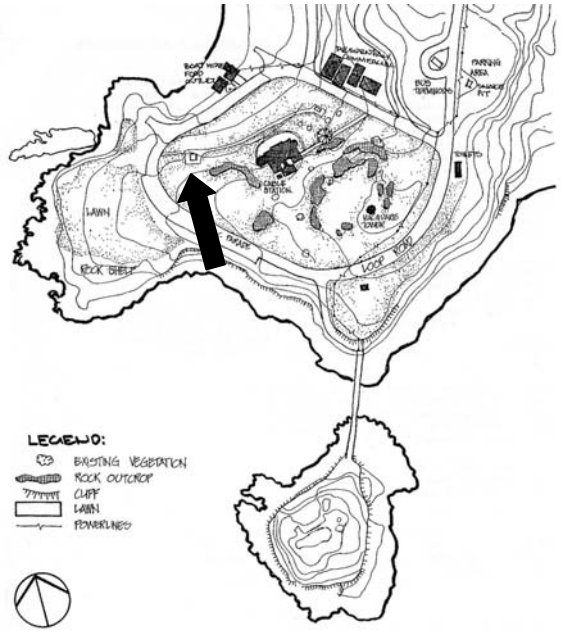
Inventory:
6

Current Use and Associated Items: Historic monument. Three flagpoles are aligned to the east wall of the monument approximately two metres from its boundary wall.

Other/Former Uses and Names: La Perouse Memorial, French Monument, Astrolabe Monument.

NPWS Item ID **SHI ID**

Location Plan



Photograph

Fig. 6.1 La Perouse Monument in current landscape setting

CONDITION: **Good** **Fair** **Poor** **Ruinous** **Site Only** **INTEGRITY :** **High** **Moderate** **Low**

Physical Description

The La Perouse Monument consists of an approximately 8m high stone obelisk on a stone base surrounded by two wall enclosures. A raised pebble bed is contained by the inner low retaining wall. Surrounding this is a pebbled pathway, trimmed by a low concrete edging. This pathway is surrounded by a lawn bed which in turn is bounded by a rendered and painted sandstone wall. The wall is topped with a row of ridged capping stones. All of the Monument's stone and concrete surfaces have been unsympathetically painted a mid yellow/brown tone, presumably to appear similar to sandstone.

The outer wall supports a cast iron fence barrier approximately one metre high above the stone wall. This fencing has been replaced numerous times following the Monument's erection. An iron gateway to the Monument is positioned in the centre of the eastern facade of the outer wall. Fixed to the top of the obelisk is a brass model of an astrolabe. At its base, below recessed inscriptions is a selection of approximately forty brass ship plates attached to the monument. These are either surface mounted on the base itself or attached to angled concrete mountings. Two in-ground lights are located within the monument grounds – one each in the northeast and southwest corners of the grassed area. A pebbled concrete pathway surrounds the Monument.

Current Views and Condition

Fig. 6.3 Base of the monument highlighting the rings of low walls, gravel paths and lawn surrounding the obelisk.

Fig. 6.4 Detail of the brass astrolabe fixed to the top of the painted obelisk.

Fig. 6.5 Detail of the base of the obelisk showing brass plaques fixed to monument with screws. Some are mounted on angled concrete supports.

Plans and Drawings

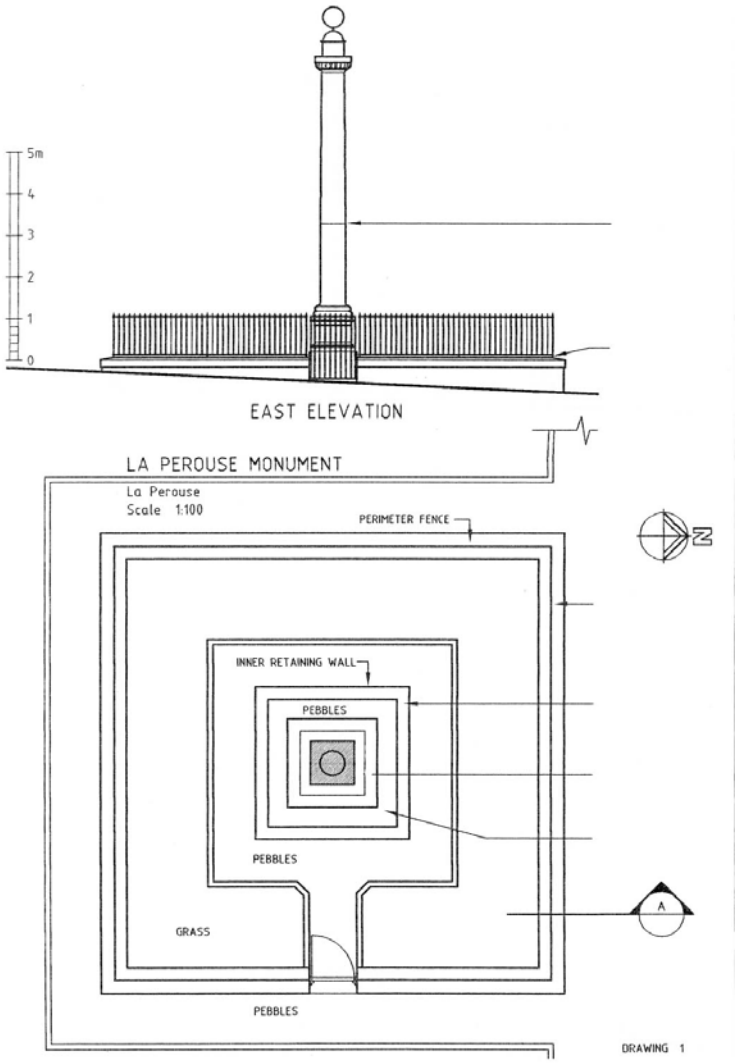


Fig. 6. 2 Plan and elevation of La Perouse monument 2001 (from Cox et al. : dwg no. 1).

Chronology of works

26 January 1788	**La Perouse arrives in Botany Bay with his ships the *astrolabe* and the *boussole* (Tuck: 161).**
17 February 1788	Pere le Receveur dies at Botany Bay. (Kass: 10).
11 March 1788	**La Perouse leaves Botany Bay (Tuck: 161).**
Late 1780s	Arthur Phillip has an engraved copper plate installed on a tree near to Pere Le Receveur's grave (Tuck: 162).
1819	**By 1819 at least (possibly even from 1802), French visitors to Sydney begin to visit the sites of La Perouse's stay and the grave of Pere Le Receveur (Tuck 161).**
March 1824	**First recorded visit to the French sites at La Perouse Headland by the crew of the *Coquille*. Soldiers stationed at the watchtower showed the crew to the grave and garden sites. The crew carves an inscription in a nearby tree to the Pere's grave (Tuck: 161).**
26 August 1825	**De Bougainville visits sites of Pere le Receveur's grave and La Perouse stockade (Kass : 10). De Bougainville proposes to erect permanent memorials to both Receveur and La Perouse and lays the foundation stone for the La Perouse monument (Tuck: 162). Monuments financed by de Bougainville (Tuck: 182).**
January 1828	**Work of building the La Perouse monument commences under the supervision of Captain Piper, James Macarthur and Major Ovens (Kass : 11) (Tuck: 162). Total cost 83 pounds 18 shillings 5 pence**
1829	**Works completed and an engraved copper plate is attached to the La Perouse monument and four Norfolk Island pines planted within the monument precinct (Kass : 11).**
1860s	**Reports that much of the La Perouse monument inscriptions are illegible (Tuck: 165).**
1867	Pere le Receveur's tomb first enclosed with fencing (Kass : 11).
1876	**Both monuments enclosed with painted iron railings. Also stonework was recorded as painted. Some work undertaken/overseen by custom station residents (Tuck: 166).**
1877-80	**Records show repairs made to monuments annually during this period (Kass : 11).**
1880s	**The crew of the *Le Bruat* attach their ship plaque to the La Perouse monument beginning the ritual of plaque tributes (Tuck: 166).**
1906	**French government provides money for restoration work to both the monument and tomb. Kass pg 11 Suggestion that this money provided for the substitution of a brass astrolabe for the original steel one at the top of the monument (Tuck: 166).**
c.1917	**By 1917 at least, the monument has altered to consist of two low enclosure walls (Tuck: 166).**
c.1920s	**Deteriorated railings are replaced with anchor chain supported by pylons on the perimeter walls. Later the perimeter walls collapse under the weight and are replaced again (Tuck: 166).**
November 1937	**La Perouse headland area gazetted as the La Perouse Monument Reserve. Trustees appointed (Tuck: 162).**
1958	Renovation work undertaken on Pere le Receveur's tomb. Concreted surround and new iron railings installed (LPMT: 19 Sept 1958 AM).
1964	An ironstone pathway is constructed between the two French sites (Tuck: 190).
1967	Precinct gazetted as 'La Perouse Monument Historic Site' and classified 'Historic Zone' under the newly established N.S.W. NP&WS Act 1967. (NSW PWD: 3) (Tuck: 162).
1974	**National Trust of Australia (N.S.W.) listed as 'classified' the landmarks of La Perouse Monument Historic Site under 'Botany Bay entrance' (NSW PWD: 4).**
1988	**Monuments officially incorporated into the Botany Bay National Park in 1988 (Tuck: 162).**

Historical Images

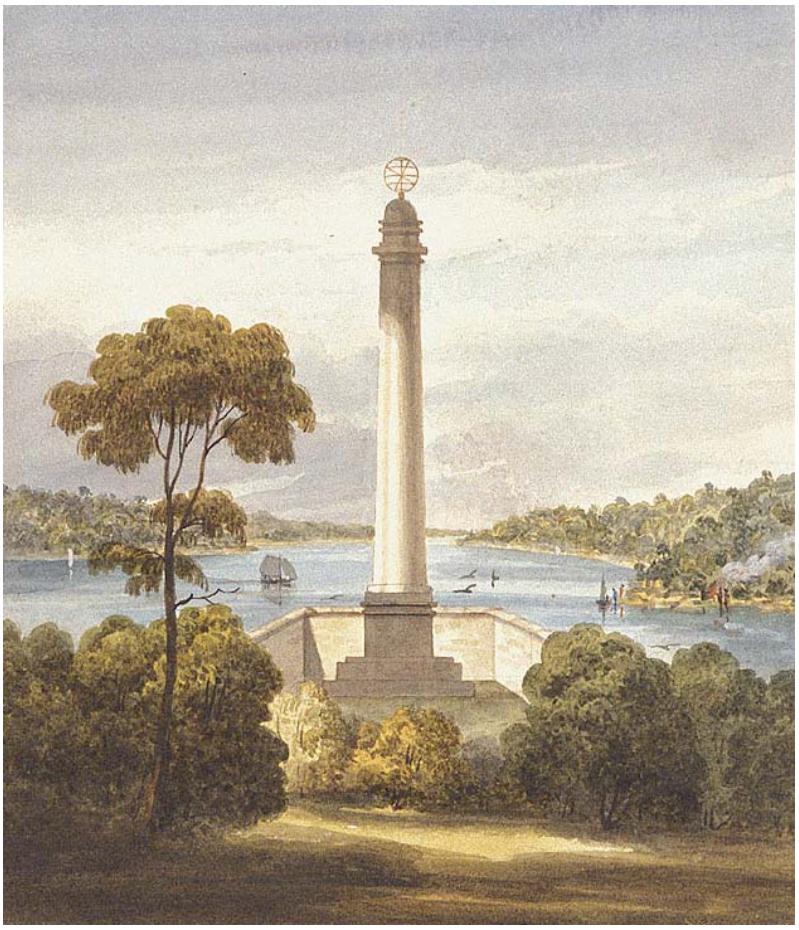


Fig. 6.6 Watercolour of La Perouse Monument by Richard Jones (c.1830s).

SLNSW ML PXA 972

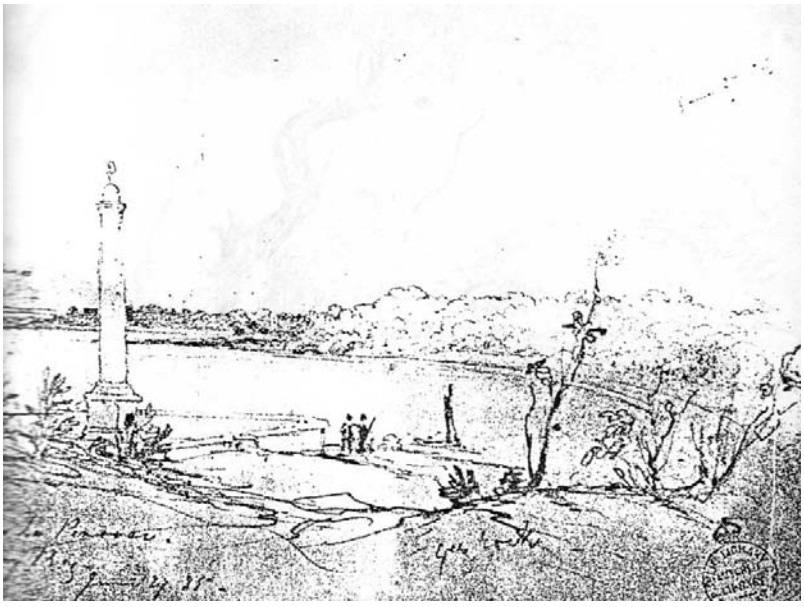


Fig. 6.7 Sketch of Monument by Conrad Martens (1835).

SLNSW ML - ML SPF/ZPXC 391

Fig. 6.8 Image of Monument depicting un-rendered stone coursing of enclosure wall. Date unknown.

SLNSW ML - GPO 1 - 18318

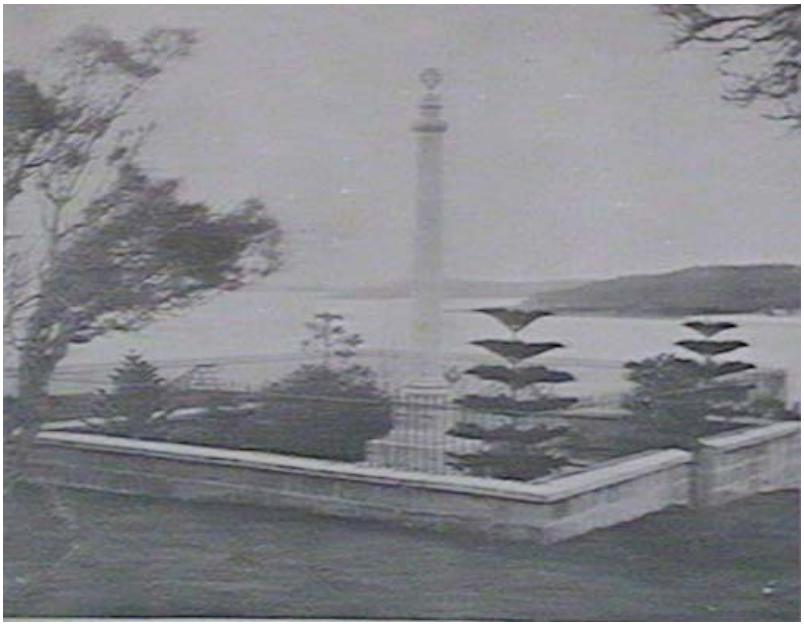


Fig. 6.9 La Perouse Monument. The sandstone coursing of the enclosure wall and its capping is visible. The iron fencing on the wall has a straight profile. Date unknown.

SLNSW ML SPF8

Fig. 6.10 Distant view of La Perouse Monument from 1876 (time of the laying of the submarine telegraph cable).

SLNSW ML GPO 1 - 05256

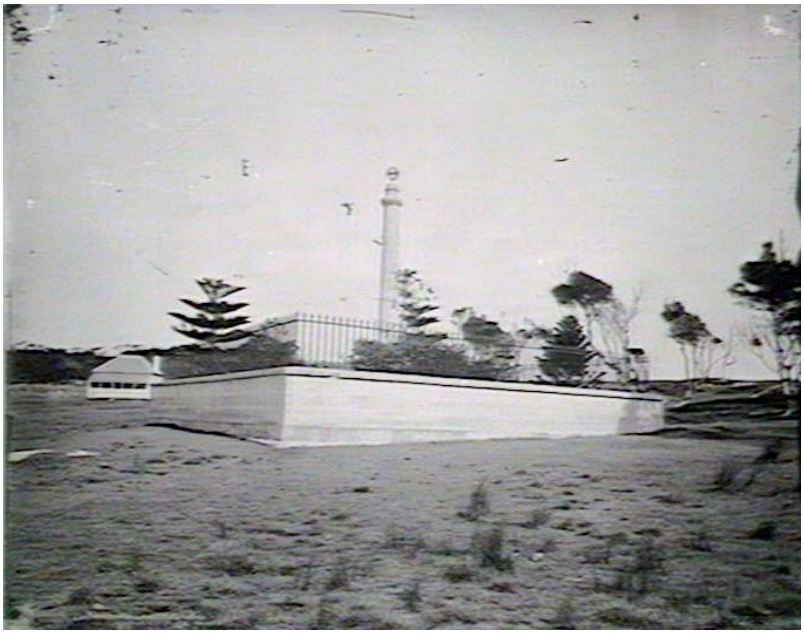


Fig. 6.11 View of Monument from 1876 (time of the laying of the submarine telegraph cable). The iron fencing on the wall has a straight profile.

SLNSW ML d1-05255.

Fig. 6.12 La Perouse Monument c.1900.

SLNSW ML PXE 711/174

Fig. 6.13 View of the La Perouse Monument with Cable Station building in the distance. Tentatively dated 1906-1917 (Tuck: 174).

SLNSW ML SPF

Fig. 6.14 La Perouse Monument February 1920. Note flagpoles and fencing with scalloped profile.

SLNSW ML GPO 1-14146

Fig.6.15 La Perouse Monument with scalloped profile fencing (could be anchor chain supported on wall by pylons). July 1924.

SLNSW ML GPO 1 - 18695

Fig. 6.16 French sailors photographed at the La Perouse Monument. Flagpole in foreground to the right. Fencing has scalloped profile and appears to be painted a dark tone. Date unknown.

SLNSW ML - Home and Away - 21037

Item name: La Perouse Monument	**Inventory No.** 6

Summary Statement of Significance

The cultural heritage value of the La Perouse Monument is as a symbol of the La Perouse Expedition that is associated with the ongoing relationship between France and Australia, which is an intangible value of State and to a lesser extent national, significance value.

The loss of the La Perouse expedition in the Pacific drew the attention of French mariners to their last known anchorage 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 La Perouse Expedition held by the officers of the French expedition ships, who collected money among themselves to raise the monument. The inclusion of the mariner's astrolabe at the top of the monument is a reference to the name of La Perouse's ship – *The Astrolabe*.

The La Perouse Monument and Pere Le Receveur's grave 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.

Name of Place: Père Le Receveur Tomb

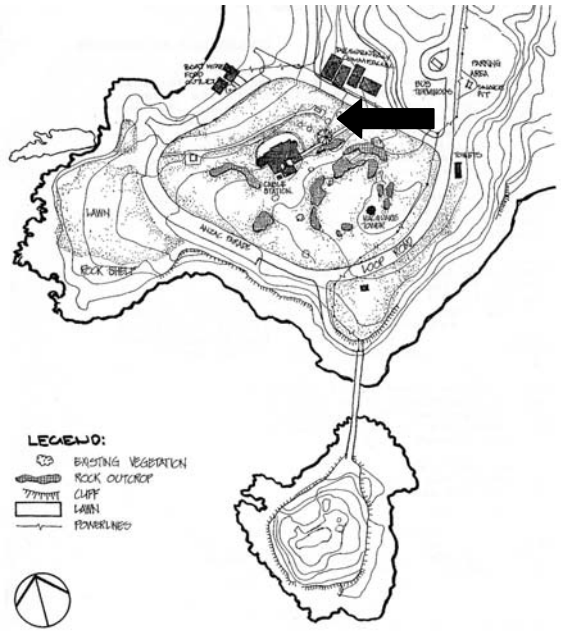
Inventory: 7

Current Use and Associated Items: Historic monument.

Other/former Uses and names: Receveur memorial, Le Receveur Grave, Tomb of Pere Receveur

NPWS Item ID **SHI ID**

Location Plan



Photograph

Fig. 7.1 Pere Receveur Monument.

CONDITION: **Good** **Fair** **Poor** **Ruinous** **Site Only** **INTEGRITY :** **High** **Moderate** **Low**

Physical Description

The Pere Le Receveur Tomb consists of a painted stone tomb structure surrounded by two rectilinear wall enclosures. Similarly to the La Perouse Monument, the Tomb has a pebble bed immediately around the structure, contained by a low concrete wall.

Beyond a band of lawn, the Tomb is further enclosed by another low concrete wall which supports a metal, picket style fence approximately one metre high above the ground. The fence matches that of the La Perouse Monument. All of the Tomb's stone and concrete surfaces are unsympathetically painted a mid yellow/brown colour, which matches that of the La Perouse Monument. The inscription on the Tomb face is painted in black. A brass cross is located at the head of the Tomb and is a replacement of an earlier iron cross.

A pebble-finished concrete path surrounds the Tomb. There is a single outdoor light bollard in the south eastern corner of the Tomb enclosure. A coated aluminium information panel is located outside the Tomb fence on the eastern side.

Current Views and Condition

Fig. 7.3 View of Pere le ReceveurTomb displaying outdoor light bollard leaning on an angle.

Fig. 7. 4 Pere le Receveur Tomb. Information sign located to the east of the tomb enclosure on the pebblecrete path.

Fig. 7. 5 Detail of the NPWS Botany Bay National Park information panel located at the eastern side of the tomb site.

Plans and Drawings

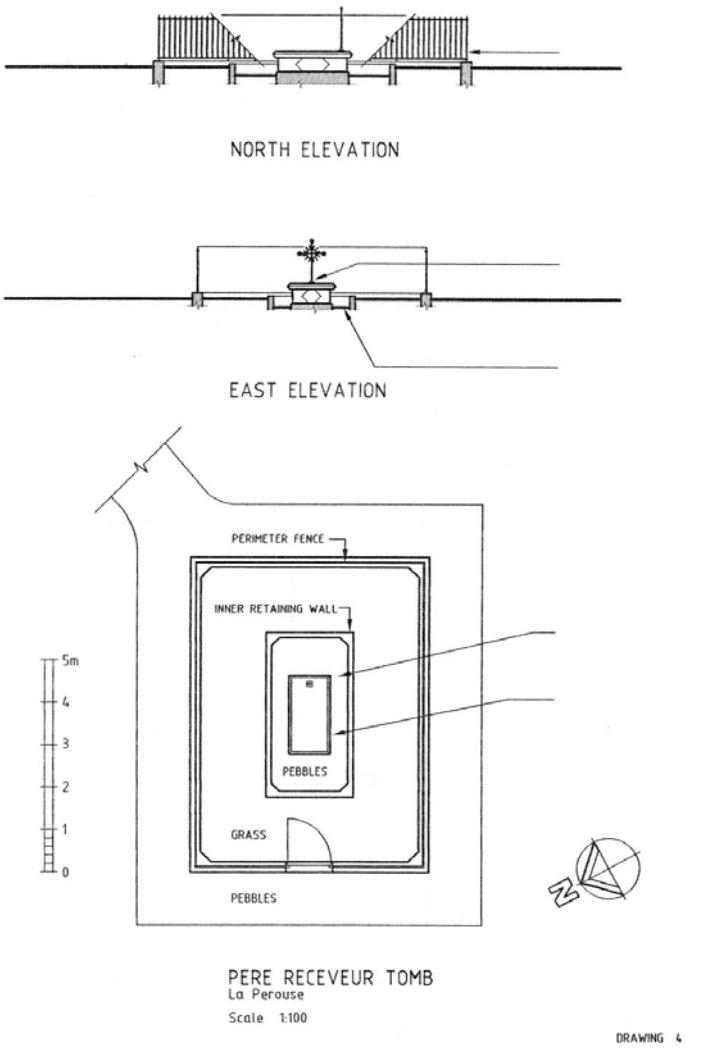


Fig. 7.2 Plan and elevation of Pere Receveur tomb 2001 (from Cox et al.: dwg no. 4).

Chronology of works

26 January 1788	La Perouse arrives in Botany Bay with his ships the *astrolabe* and the *boussole* (Tuck: 161).
17 February 1788	**Pere le Receveur dies at Botany Bay. (Kass: 10).**
11 March 1788	La Perouse leaves Botany Bay (Tuck: 161).
Late 1780s	**Arthur Phillip has an engraved copper plate installed on a tree near to Pere Le Receveur's grave (Tuck: 162).**
1819	**By 1819 at least (possibly even from 1802), French visitors to Sydney begin to visit the sites of La Perouse's stay and the grave of Pere Le Receveur (Tuck 161).**
March 1824	**First recorded visit to the French sites at La Perouse Headland by the crew of the *Coquille*. Soldiers stationed at the watchtower showed the crew to the grave and garden sites. The crew carves an inscription in a nearby tree to the Pere's grave (Tuck: 161).**
26 August 1825	**De Bougainville visits sites of Pere le Receveur's grave and La Perouse stockade (Kass : 10). De Bougainville proposes to erect permanent memorials to both Receveur and La Perouse and lays the foundation stone for the La Perouse monument (Tuck: 162). Monuments financed by de Bougainville (Tuck: 182).**
January 1828	Work of building the La Perouse monument commences under the supervision of Captain Piper, James Macarthur and Major Ovens (Kass : 11) (Tuck: 162). Total cost 83 pounds 18 shillings 5 pence
1829	Works completed and an engraved copper plate is attached to the La Perouse monument and four Norfolk Island pines planted within the monument precinct (Kass : 11).
1860s	Reports that much of the La Perouse monument inscriptions are illegible (Tuck: 165).
1867	**Pere le Receveur's tomb first enclosed with fencing (Kass : 11).**
1876	**Both monuments enclosed with painted iron railings. Also stonework was recorded as painted. Some work undertaken/overseen by custom station residents (Tuck: 166).**
1877-80	**Records show repairs made to monuments annually during this period (Kass : 11).**
1880s	The crew of the *Le Bruat* attach their ship plaque to the La Perouse monument beginning the ritual of plaque tributes (Tuck: 166).
1906	**French government provides money for restoration work to both the monument and tomb. Kass pg 11 Suggestion that this money provided for the substitution of a brass astrolabe for the original steel one at the top of the monument (Tuck: 166).**
c.1917	By 1917 at least, the monument has altered to consist of two low enclosure walls (Tuck: 166).
c.1920s	Deteriorated railings are replaced with anchor chain supported by pylons on the perimeter walls. Later the perimeter walls collapse under the weight and are replaced again (Tuck: 166).
November 1937	La Perouse headland area gazetted as the La Perouse Monument Reserve. Trustees appointed (Tuck: 162).
1958	**Renovation work undertaken on Pere le Receveur's tomb. Concreted surround and new iron railings installed (LPMT: 19 Sept 1958 AM).**
1964	An ironstone pathway is constructed between the two French sites (Tuck: 190).
1967	Precinct gazetted as 'La Perouse Monument Historic Site' and classified 'Historic Zone' under the newly established N.S.W. NP&WS Act 1967. (NSW PWD: 3) (Tuck: 162).
1974	National Trust of Australia (N.S.W.) listed as 'classified' the landmarks of La Perouse Monument Historic Site under 'Botany Bay entrance' (NSW PWD: 4).
1988	**Monuments officially incorporated into the Botany Bay National Park in 1988 (Tuck: 162).**

Historical Images

Fig. 7.6 Sketch of Tomb of Pere le Receveur by Oswald W.B. Brierly. Inscription of grave site on tree and La Perouse Monument (at the far left can be seen). 30 November 1842

SLNSW ML ZDGD 19/f.2

Fig. 7.7 Grave of Father le Receveur. Note stone coursing is visible. Date unknown.

SLNSW ML GPO 1-18126

Fig. 7.8 View of Tomb of Pere le Receveur from the north. Tomb has been enclosed by iron railing fence and stone base. July 1924

SLNSW ML GPO 1 - 18694

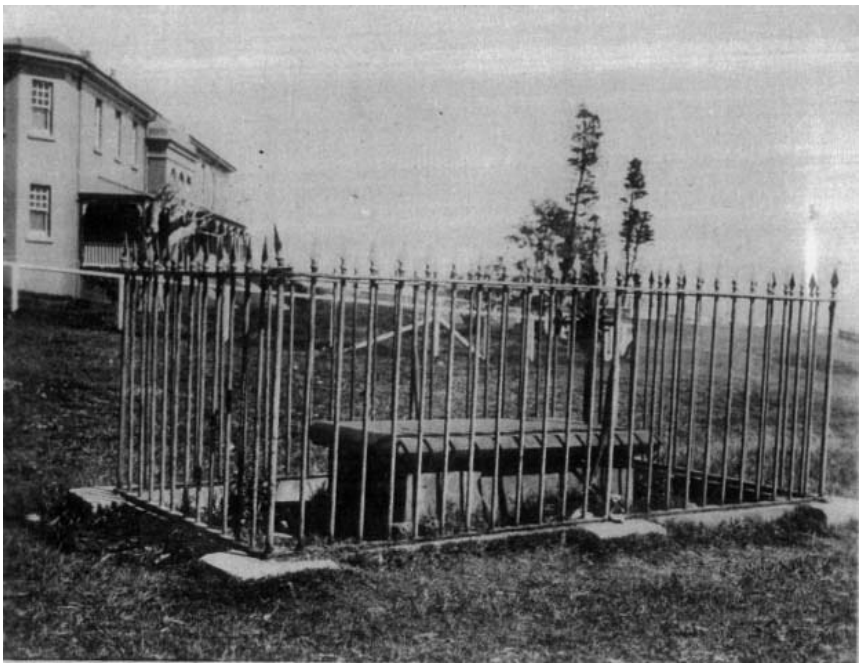


Fig. 7.9 Tomb with Cable Station behind. Date unknown.

SLNSW ML SPF

Summary Statement of Significance

The Pere Le Receveur Tomb is an item of State cultural heritage significance value as a symbol of the association with the La Perouse expedition. Pere Le Receveur, a Franciscan monk and naturalist on the La Perouse expedition died and was buried at La Perouse in 1788. The tomb constructed in 1828 is a monument that was prompted by de Bougainville and the tradition of pilgrimage to the La Perouse headland by visiting French nationals and by the local French community that was already strong by the early 1800s. It is the first European grave in the region and is associated with the colourful and tragic history of the La Perouse Expedition. The grave itself is unexceptional.

Name of Place:
Miscellaneous Items

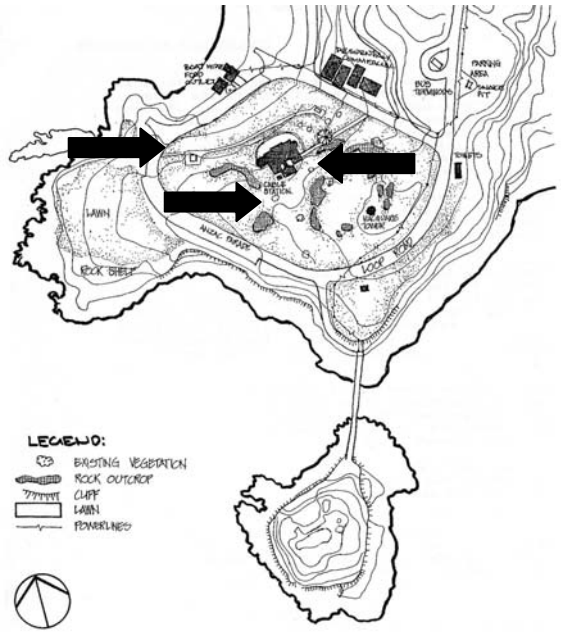
Inventory:
8

Current Use and Associated Items: Assorted items, no current uses except stairs.

Other/Former Uses and Names: Various, N/A

NPWS Item ID SHI ID

Location Plan



Photograph

Fig. 8.1 & .2 Initials carved in sandstone and rock cut basin.

CONDITION: Good Fair Poor Ruinous Site Only **INTEGRITY: High Moderate Low**

Physical Description

A variety of unusual miscellaneous items are located in the immediate study area. These items are associated with the inhabitation of La Perouse Headland, and especially the Cable Station. Further archaeological investigation is required to gain further understanding of each item's significance. All appear to be of local significance value.

To the northeast of the Cable Station, on the sandstone outcrop, are the remains of a circular brick and concrete water tank stand. To the north of the Battery Room are various carvings in the sandstone rock face in an area possibly used to store coal (Blaxland: 2007).

A pair of stairs cut out of the sandstone rock face is located one to the east and one to the south of the Cable Station. Numerous carefully cut basin-shaped cuttings are located to the south east of the Cable Station. Most are lined with a bitumen-like coating. One has an arrow carved in the sandstone face nearby and could possibly indicate a compass north point. To the southwest of the Cable Station lies a row of worker's initials engraved in the concrete topping to the loop road's retaining wall. The road was completed in 1963.

Behind the Cable station running north to south is an earth embankment which could be the original road to the now demolished Top House which had been built to the south of the Cable Station.

Fig. 8. 3 Circular brick water tank stand to the east of the Cable Station building. Date unknown.

Fig. 8.1 Initials carved in sandstone cutting to the north of the Battery Room where coal may have been stored (Blaxland: 2007). Date unknown.

Fig. 8.4 Stair cut into sandstone rock face. Eroded treads have been topped with concrete. A water channel has also been carved into the sandstone to assist water to run away from the stairs and Cable Station building. Date unknown.

Fig. 8.5 Stairs cut into sandstone to the south of the Cable station building. Date unknown.

Fig. 8. 2 Rock-cut basin to southeast of Cable Station. Base on cutting painted with bitumen-like paint/sealant. Date unknown.

Fig. 8.6 Rock-cut basin to south of Cable Station. Base on cutting painted with bitumen like paint/sealant and possible north compass point carving. Date unknown.

Fig. 8.7 Rock-cut basin. Base on cutting painted with bitumen like paint/sealant. Date unknown.

Fig. 8.8 Detail of finely carved rock-cut basin-shaped cutting.

Fig. 8.9 Row of workers' initials at loop road retaining wall to the southwest of the Cable Station building. The Loop road circumscribing the Historic monument Reserve was completed in 1963.

Fig. 8.10 Earth embankment. View looking southwest from Cable Station building. Tentatively identified as the road to now demolished Top House (Blaxland: 2007).

Fig. 8.11 Earth embankment. View looking northeast from Cable Station building. Identified as Road to now demolished Top House (Blaxland: 2007).