

Acknowledgements: Images

Figure 7

'Titan', a floating crane unloading a 9.2 inch gun off the barge and onto the beach at North Head' c 1936

Source: Australian War Memorial AWM P02729.057.

Figure 8

'9.2 inch Mark 10 gun. Firing practice at North Battery', 1939

Source: Royal Australian Artillery National Museum, Royal Australian Artillery Historical Company.

Figure 9 (left)

'Fortress Plotting Room' 20 January 1944

Source: Australian War Memorial AWM 063468.

Figure 9 (right)

'Entry to Plotting Room' 25 November 2005

Source: Roxana Vlack, Sydney Harbour Federation Trust.

Figure 10

'Sydney Fire Command'

Source: Royal Australian Artillery National Museum, Royal Australian Artillery Historical Company.

Figure 11

'North Battery'

Source: Royal Australian Artillery National Museum, Royal Australian Artillery Historical Company.

Figure 12

'Kine Theodolite demonstration C1944'

Source: Australian War Memorial AWM P00613.001.

Figure 13

'School on Parade'

Source: J.A.R. Jansen – from 'History of the School of Artillery 1885 to 1996', Ian Burch, p.96.

Figure 14

'The Hamel Gun' 26 February 1992

Source: School PR Album 90-92 'History of the School of Artillery 1885 to 1996', Ian Burch, p.22.

Figure 15

'Artillery Troops leaving North Head' 1996

Source: Royal Australian Artillery National Museum, Royal Australian Artillery Historical Company.

Oil Pastels and drawings by Nick Hollo 2003 - 2010

- Including view of North Head and Sydney Harbour, Bandicoot spotlight, Parade Ground activities, Boardwalk tour.

Related Studies and Documents

Note: The following studies are available for viewing at the Harbour Trust Resource Centre. Contact the Trust on (02) 8969 2100 for further information. Extracts of the Conservation Management Plans (Historical Analysis and Conservation Policies) identified with an asterisk (*) can also be viewed through the Trust website www.harbourtrust.gov.au

Aboriginal Heritage Office, 2007. *North Head Aboriginal Site Management Report*.

Australian Wildlife Conservancy, November 2007. *North Head Operational Plan*.

Banksia Heritage and Archaeology, 2006, *Third Quarantine Station Cemetery – Archaeological Management Plan*.

Brayshaw, Helen. June 1996, *School of Artillery North Head Aboriginal Heritage*.

Burch, Ian 1996, *History of the School of Artillery 1885-1996*.

Burton, Andy. 2008, *The Birds of North Head, NSW: third report by Birds Australia to the Sydney Harbour Federation Trust*. Birds Australia Southern NSW and ACT, Sydney.

Clouston, September 1996, *North Head Planning Strategy – Draft*.

Christopher Hallam and Associates, September 2002, *Transport Planning Review of Sydney Harbour Federation Trust Lands*.

Conacher Travers Pty Ltd, 2002, *Interim Bushfire Management Plan for the Former School of Artillery, North Head*.

Dames and Moore Pty Ltd, 1999, *Phase 1 Geotechnical and Contamination Assessment, North Head Defence Site*.

Darwala-lia February 2001, *The Community Approach to Recording Aboriginal Heritage – A Case Study at North Head, Sydney Harbour National Park*.

Dawbin Architects Pty Ltd, 6 June 2008 (final draft). *North Head Former School of Artillery Conservation Management Plan – Volume 1: The Core Buildings*.

Dawbin Architects Pty Ltd, November 2009. *North Head Former School of Artillery Conservation Management Plan – Volume 2: The Outer Areas*.

Fulford, R.K. 1994, *We stood and waited: Sydney's Anti-Ship Defences 1939-1945*.

GIS Environmental Consultants, September 2003, *Fauna of North Head*.

GIS Environmental Consultants, November 2003, *Flora of North Head*.

Gojak, Denis, NPWS Historical Archaeologist July 1991, *Archaeological Inspection report: Third Quarantine Station Cemetery, North Head*.

G-tek Australia Pty Limited, 30 November 2006. *Explosive Ordinance Works, Former School of Artillery, North Head*.

Helen Brayshaw Heritage Consultants, June 1996, *Environmental Management Plan, School of Artillery North Head, Aboriginal Heritage*.

National Parks & Wildlife Service, 2006, *Sydney Harbour National Park, North Head, Fire Management Strategy 2006*.

Oppenheim, Peter, 2005, *The Fragile Forts: The Fixed Defences of Sydney Harbour 1788-1963*.

PBAI Australia, December 2005, *Transport Management Plan, Former School of Artillery North Head – Final Report*.

Peter Freeman Pty Ltd and McLaren, Peter. March 1999, *North Head Defence Property, Sydney – Heritage Assessment. Volume 1 of 2: Heritage Assessment-Final Draft*.

Peter Freeman Pty Ltd and McLaren, Peter. March 1999, *North Head Defence Property, Sydney – Heritage Assessment. Volume 2 Part 1: Inventory Description School of Artillery Precinct-Final Draft*.

Peter Freeman Pty Ltd and McLaren, Peter. March 1999, *North Head Defence Property, Sydney – Heritage Assessment. Volume 2 Part 2: Inventory Description North Fort and Loop Precincts-Final Draft*.

PPK Environment & Infrastructure November 2001, *Site Services Survey-North Head*.

Roberston & Hindmarsh Pty Ltd, January 2010. *North Fort North Head Conservation Management Plan*.

Schwager Brooks and Partners Architects and Heritage Consultants June 1996, *Sydney Fortress Sites at North Head: Survey and Recommendations*.

Sinclair Knight Merz, March 2002, *North Head Defence Site: Stage 2 Contamination Assessment and Validation Report-Draft*.

Sinclair Knight Merz (SKM), December 2000 *Stage 2 Contamination Assessment, North Head Defence Site*.

Sinclair Knight Merz, March 2001; *Remediation Action Plan, Department of Defence, North Head*.

Sinclair Knight Merz, March 2002 *Stage 2 Contamination Assessment and Validation Report, North Head Defence Site. Draft*.

The Royal Australian Artillery Historical Society, March 1991, *North Head Battery – A Brief History*.

Woolacott Hale Corlett & Jumikis Consulting Engineers Pty Ltd, 30 July 2007. *The School of Artillery North Head Traffic Management Report*.

Appendices

Appendix 1

Environmental Considerations

Appendix 2

Combined Schedule 5A and 7A – Environment Protection and Biodiversity
Conservation Act Regulations 10.01C and 10.03B

Appendix 3

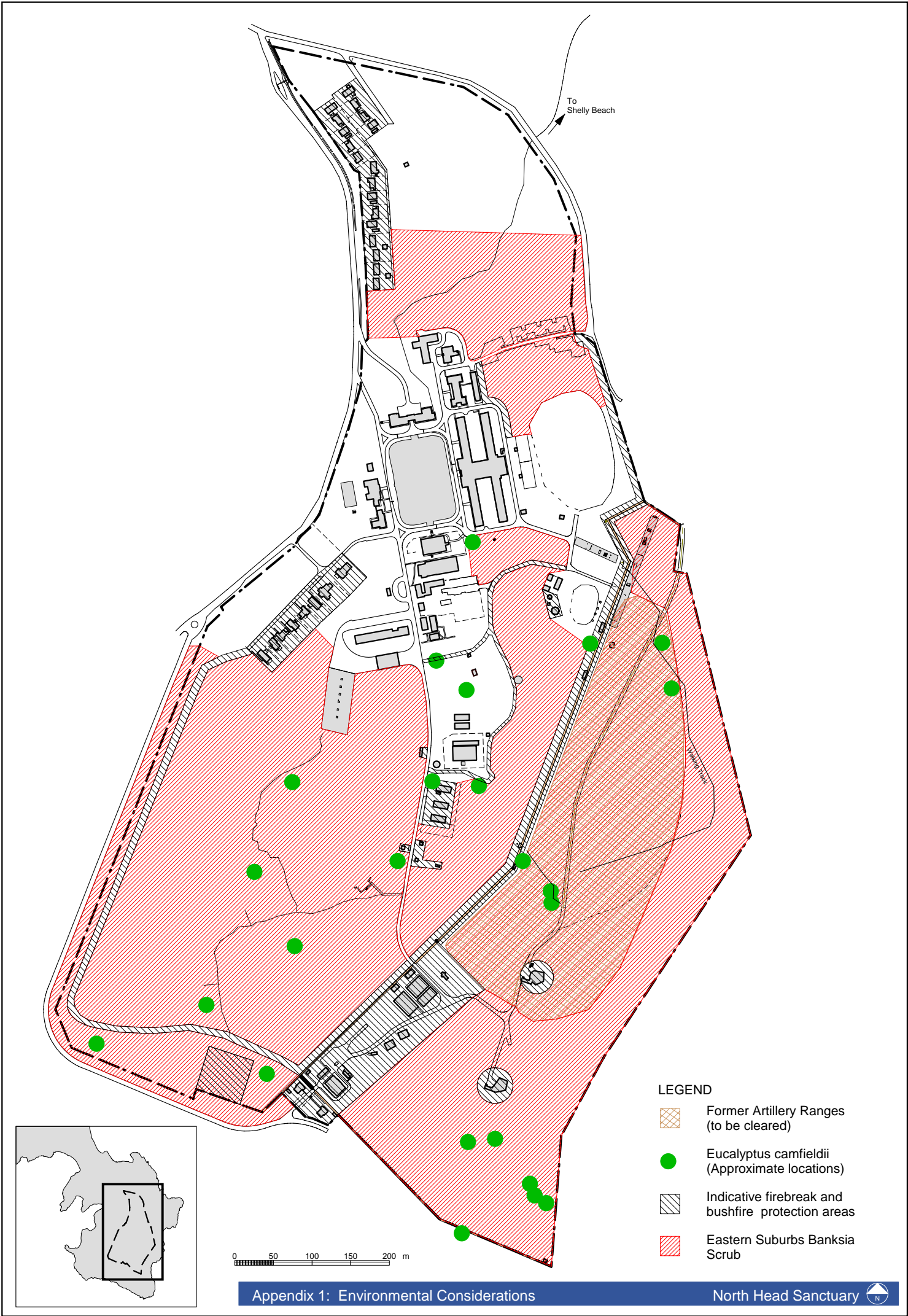
Combined Schedule 5B and 7B – Environment Protection and Biodiversity Act
Regulations 10.01E and 10.03D

Appendix 4

National Heritage Listing (including Summary Statement of Significance)





Appendix 5

Commonwealth Heritage Listings (including Summary Statement of Significance)



To
Shelly Beach

LEGEND

-  Former Artillery Ranges (to be cleared)
-  Eucalyptus camfieldii (Approximate locations)
-  Indicative firebreak and bushfire protection areas
-  Eastern Suburbs Banksia Scrub

0 50 100 150 200 m

Appendix 2 - Schedule 5A & 7A

Schedule 5A & 7A

Environment Protection and Biodiversity Act Regulations 10.01C and 10.03B

A Management Plan for a National and Commonwealth Heritage Place must:	Relevant section of the Management Plan
(a) establish objectives for the identification, protection, conservation, presentation and transmission of the National and Commonwealth Heritage values of the place; and	Aims of the plan p.6 Policy 1
b) provide a management framework that includes reference to any statutory requirements and agency mechanisms for the protection of the National and Commonwealth Heritage values of the place; and	Introduction; Aims of the plan p.6; Planning Framework pp 6-10 Policies 1, 2
c) provide a comprehensive description of the place, including information about its location, physical features, condition, historical context and current uses; and	Site Description p.11 Site History p.18 Analysis and Assessment pp. 35-48
d) provide a description of the National and Commonwealth Heritage values and any other heritage values of the place; and	Heritage values pp. 49
e) describe the condition of the National and Commonwealth Heritage values of the place; and	Condition of Commonwealth Heritage Values pp. 55
f) describe the method used to assess the National and Commonwealth Heritage values of the place; and	Conservation Management Plans p.35
g) describe the current management requirements and goals including proposals for change and any potential pressures on the National and Commonwealth Heritage values of the place; and	Aims of the plan p.7 Planning Framework pp. 6-10 Heritage Listings p.35 Outcomes pp. 86-111
h) have policies to manage the National and Commonwealth Heritage values of a place, and include in those policies, guidance in relation to the following:	Policies pp. 55-77
i) the management and conservation processes to be used;	Policies 1-30
ii) the access and security arrangements, including access to the area for Indigenous people to maintain cultural traditions;	Policies 25-28, 49
iii) the stakeholder and community consultation and liaison arrangements;	Policies 22, 28
iv) the policies and protocols to ensure that indigenous people participate in the management process;	Policies 20, 28
v) the protocols for the management of sensitive information;	n/a
vi) the planning and management of works, development, adaptive reuse and property divestment	Policies 5-12, 23, 24, 35-41, 44-47, 48-51, 52-59

proposals;	
vii) how unforeseen discoveries or disturbances of heritage are to be managed;	Policy 3, 13
viii) how, and under what circumstances, heritage advice is to be obtained;	Policies 1, 12, 24
ix) how the condition of the National and Commonwealth Heritage values is to be monitored and reported;	Monitoring and Review of the plan p.116
x) how records of intervention and maintenance of a heritage places register are kept;	Policies 14, 23, 29
xi) the research, training and resources needed to improve management;	Policy 22
xii) how heritage values are to be interpreted and promoted; and	Interpretation pp. 108 Policies 21, 31, 46, 53-55, 58
i) include an implementation plan; and	Implementation table pp. 112-115
j) show how the implementation of policies will be monitored; and	Monitoring and Review of the Plan p.116
k) show how the management plan will be reviewed.	Monitoring and Review of the Plan p. 116 Policy 30

Appendix 3 – Schedule 5B and 7B

Schedule 5B and 7B – Environment Protection and Biodiversity Act Regulations 10.01E and 10.03D

National and Commonwealth Heritage Management Principles	Issues to consider in the evaluation of management plans
1. The objective in managing National and Commonwealth Heritage places is to identify, protect, conserve, present and transmit, to all generations, their Commonwealth Heritage values.	Aims of the plan p. 5
2. The management of National and Commonwealth Heritage places should use the best available knowledge, skills and standards for those places, and include ongoing technical and community input to decisions and actions that may have a significant impact on their National or Commonwealth Heritage values.	Policies 3, 4, 22, 24, 29
3. The management of National and Commonwealth Heritage places should respect all heritage values of the place and seek to integrate, where appropriate, any Commonwealth, State, Territory and local government responsibilities for those places.	Aims of the plan p. 5 Planning framework pp. 6-13
4. The management of National and Commonwealth Heritage places should ensure that their use and presentation is consistent with the conservation of their National and Commonwealth Heritage values.	Aims of the plan p. 5 Policies 1, 2
5. The management of National and Commonwealth Heritage places should make timely and appropriate provision for community involvement, especially by people who: (a) have a particular interest in, or associations with, the place; and (b) may be affected by the management of the place.	Policy 22, 29
6. Indigenous people are the primary source of information on the value of their heritage. The active participation of Indigenous people in identification, assessment and management is integral to the effective protection of Indigenous heritage values.	Policy 22
7. The management of National and Commonwealth Heritage places should provide for regular monitoring, review and reporting on the conservation of National and Commonwealth Heritage Values.	Monitoring and Review of the plan p. 102

Appendix 4 - National Heritage Listing

North Head - Sydney, North Head Scenic Dr, Manly, NSW, Australia

Photographs None

List: National Heritage List

Class: Historic

Legal Status: [Listed place](#) (12/05/2006)

Place ID: 105759

Place File No: 1/13/024/0019

Summary Statement of Significance:

North Head is important as the northern expression of the seaward entrance to Sydney Harbour (Port Jackson) and played a major role in the cultural and military life of the colony of New South Wales, following the arrival of the First Fleet in 1788. The 'Heads', have signified arrival and departure at Port Jackson since 1788 and are recognised as important, iconic, national landmarks. North Head was portrayed by artists such as Augustus Earle as early as 1825. In 1812 the 'Heads' were referred to as the 'Port Jackson Heads', later as the 'Sydney Heads'. The Sydney Heads have iconic status for aesthetic values as landmarks in their own right, but equally as part of the setting for Sydney and its harbour.

North Head is important for its association with the establishment of quarantine in the colony of NSW and with Australia's development as an island-nation, susceptible to ship-borne disease. The isolation and strategic role of North Head was recognised in 1828 when the first vessel, the *Bussorab Merchant*, was quarantined at Spring Cove. The importance and future role of North Head was reinforced by Governor Darling's Quarantine Act of 1832, in response to the cholera epidemic in Europe in 1830. In 1832 the whole of North Head was set aside for quarantine purposes. North Head has a rich and diverse character which stems from the layering and aggregation of uses that overlay the relict and evolving cultural landscape of the Quarantine Station. The assemblage includes cemeteries, carvings and engravings which are a record of the station's history and the diverse cultural and social backgrounds of quarantined passengers, including class and ethnicity. Archaeological sites within the Quarantine Station, and in other areas of North Head, have the potential to add to our understanding of the development and operation of nineteenth century quarantine practices and procedures from the 1830s-1870s, and in particular from the 1830s-1850s, a formative period for quarantine practices in the Australian colonies. The potential for archaeological investigation extends to the former mooring areas and littoral zones at Quarantine Cove, where vessels were cleansed before being returned to their owners, and to Stores Beach

The North Head Quarantine Station is important, in conjunction with the Quarantine Station at Point Nepean, in illustrating the evolution and development of quarantine practices employed at Stations in other states.

The North Head Quarantine Station, excluding the Seamen's Hospital, comprises the oldest and most intact example of quarantine facilities in Australia. The North Head Quarantine Station has the longest history (1828-1977) of quarantine use in Australia and provides the best evidence in Australia of the impact of changing social attitudes and scientific demands on quarantine from the 1830s-1980s, as well as the human story of quarantine. Over 13,000 persons, including convicts and free migrants, were to pass through the Station before its closure in 1977. The Quarantine Station was used for returning soldiers during WW1 and WW2, prisoners of war, evacuees from Cyclone Tracy in 1974 and refugees from Vietnam in 1975. The Station is particularly associated with the development of health policy by the NSW and Commonwealth governments during the nineteenth and early twentieth centuries, including the treatment of plague and Spanish influenza victims. The station was closely associated with the smallpox epidemic of 1881, which resulted in better facilities, including a new hospital, and stricter zoning by fences, including a separate Asiatics' area in response to requests from the Shipping Owners Association. In this respect the Station is an expression of the gradual implementation during the 1880s of Immigration Restriction Acts in the colonies as an expression of the white-Australia policy.

The major groups of buildings, erected 1873-1909 and 1910-1920, although contemporary with surviving complexes in other states, are rare in terms of the range of buildings and their relative intactness. The Superintendents Residence at North Head, erected in 1854, appears to be the earliest surviving purpose built quarantine related structure in Australia. The Quarantine Station is important in demonstrating the principal characteristics and development of quarantine stations in Australia during the nineteenth and early twentieth centuries. The principal characteristics, in addition to its location at the entrance to port and its physical isolation, include the conscious and enforced classification of the land, based on health issues, class and race and the institutional nature of the place. This included the isolation of the hospital, seen, but not approached from many parts of the Station; the Wharf and

Disinfection areas, which stood as a barrier between the inmates and the main line of escape, and the Administration Area, which guarded the land route out; the separation of the First, Second and Third class passengers into barracks style accommodation in different areas, with the administration area interposed between Third Class and the rest, imposing class distinctions within the landscape; and the clear separation of the Asian Accommodation, imposing a racial layer on top of class differentiation. The cultural landscape includes cemeteries, monuments, fences, walls, boundary markers and cairns as well as tracks, paths and roads which document the development and meaning of the Station and reinforce the sense of segregation and isolation. Fences and stone walls characteristically formed an integral part of the security and boundaries of the Station. Specific responses to functional needs and the development of health practices and procedures designed to protect the colony, State and Nation from infectious diseases created a significant cultural landscape. The landscape was one of controlled movement with well defined groups of buildings set in precincts, reinforced by the institutional nature of the buildings and the unity of their design.

Official Values: Criterion: A Events, Processes

North Head is important as the northern expression of the seaward entrance to Sydney Harbour (Port Jackson) and played a major role in the cultural and military life of the colony of New South Wales, following the arrival of the First Fleet in 1788. The 'Heads', have signified arrival and departure at Port Jackson since 1788 and are recognised as important, iconic, national landmarks.

The North Head Quarantine Station is important for its association with the establishment of the colony of NSW and with Australia's development as an island-nation, susceptible to ship-borne disease. The isolation and strategic role of North Head was recognised in 1828 when the first vessel, the *Bussorab Merchant*, was quarantined at Spring Cove. The importance and future role of North Head was reinforced by Governor Darling's Quarantine Act of 1832, which set aside the whole of North Head for quarantine purposes in response to the cholera epidemic in Europe in 1830.

The North Head Quarantine Station is important, in conjunction with the Quarantine Station at Point Nepean, in illustrating the evolution and development of quarantine practices employed at Stations in other states.

The North Head Quarantine Station, excluding the Seamen's Hospital, comprises the oldest and most intact example of quarantine facilities in Australia. North Head provides the best evidence in Australia of the impact of changing social attitudes and scientific demands on quarantine from the 1830s-1980s, as well as the human story of quarantine. Over 13,000 persons, including convicts and free migrants, were to pass through the Station before its closure in 1977. The Quarantine Station was used for returning soldiers during WW1 and WW2, prisoners of war, evacuees from Cyclone Tracy in 1974 and refugees from Vietnam in 1975. The Station is particularly associated with the development of health policy by the NSW and Commonwealth governments during the nineteenth and early twentieth centuries, including the treatment of plague and Spanish influenza victims. The station was closely associated with the smallpox epidemic of 1881, which resulted in better facilities, including a new hospital, and stricter zoning by fences, including a separate area for Asiatics in response to requests from the Shipping Owners Association. In this respect the Station is an expression of the gradual implementation during the 1880s of Immigration Restriction Acts in the colonies as an expression of the white-Australia policy.

North Head has a rich and diverse character which stems from the layering and aggregation of uses that overlay the relict and evolving cultural landscape of the Quarantine Station. The assemblage includes a navigation obelisk (L4) and roads, tracks, boundary markers, cemeteries, carvings and engravings, which are a record of the station's history and the diverse cultural and social backgrounds of quarantined passengers, including class and ethnicity. Standing structures and sites include:

Cemeteries and memorials

(site 111A1, c. 1837-1853); (L1, 1853-1881); (VA1, 1881-1925); and the Constitution Monument (L9, 1855).

Boundaries

Ashlar sandstone walls (site L10 1930s, north-western boundary c. 1890); and sandstone cairn (111A3, 1830s). Wharf Area

(A14-A17, 1914-1915); (A6-A7, 1912-1920); (A8, 1919); (A11-A12, 1912-1920); (A9, 1912-1920); the wharf area and jetty; the Cannae Point wooden Signal mast; and flag poles at Quarantine Beach and within the Administrative Area.

Hospital and Isolation Ward Area

(H1, c. 1882); (H2, c. 1912); (H3, c. 1912); (H4, c. 1912); (H5, c. 1912); and (H7, 11 c. 1912).

Third Class/Asiatics Area

(P22, c. 1883); (P27, 1912-1914); (P28-P29); (S9, c. 1883); and (P14-P16, 1899-1900).

First Class Area

1890s (P3, P7, P4, P36, P6, P13 and P11). From 1875 (P1, P2, P5, P9 and P10)

Second Class Area

1901 (P11, P12 and P13).

Administration Area

(S6, 1853); (A1, 1911-1912); (A20, c. 1921); (A24, 1911-1912); (A25, c. 1900); (S5, 1870), (S1 and S2, c. 1883), (S12, 1913); (S14, 1938); (S15 and S16, post 1950); and (S4, S7 and S10).

Criterion: B Rarity

The North Head Quarantine Station has the longest history (1828-1977) of quarantine use in Australia. The major groups of buildings, erected 1873-1909 and 1910-1920, although contemporary with surviving complexes in other states, are rare in terms of the range of buildings and their relative intactness. The Superintendents Residence at North Head, erected in 1854, appears to be the earliest surviving, purpose-built, quarantine-related structure in Australia.

Criterion: C Research

An estimated 47 potential archaeological sites within the North Head Quarantine Station, and in other areas of North Head, have the potential to add to our understanding of the development and operation of nineteenth century quarantine practices and procedures from the 1830s-1870s. In particular, archaeological research would enable the period from the 1830s-1850s, a formative period for quarantine practices in the Australian colonies, to be better understood and interpreted in the context of the archival record and the surviving, functionally-related, buildings, planning and layout of the Station. The potential for archaeological investigation extends to the former mooring areas and littoral zones at Quarantine Cove, where vessels were cleansed before being returned to their owners, and to Stores Beach.

Criterion: D Principal characteristics of a class of places

North Head Quarantine Station is important in demonstrating the principal characteristics and development of quarantine stations in Australia during the nineteenth and early twentieth centuries. These characteristics include the physical isolation of the site, individual quarantine functions and medical protocols and planning and layout, including access by sea. Landscape and spatial elements reinforce the social and medical philosophies upon which the layout of the quarantine station was based, including the separation of social classes and isolation of more contagious conditions.

The North Head quarantine station is also important in representing quarantine practices in the 1880s and early 1890s. The integrity of the fabric dating from this time enables the principal characteristics of conscious and enforced classification, based on health issues, class and race and the institutional nature of quarantine stations to be illustrated. This included the isolation of the hospital, seen, but not approached from many parts of the Station; the Wharf and Disinfection areas, which stood as a barrier between the inmates and the main line of escape, and the Administration Area, which guarded the land route out; the separation of the First, Second and Third class passengers, with the Administration Area interposed between Third Class and the rest, imposing class distinctions within the landscape; and the clear separation of the Asian Accommodation, imposing a racial layer on top of class differentiation. The cultural landscape includes cemeteries, monuments, fences, walls, boundary markers and cairns as well as tracks, paths and roads which document the development and meaning of the Station and reinforce the sense of segregation and isolation. Fences and stone walls characteristically formed an integral part of the security and boundaries of the Station.

Common periods of development with the Point Nepean Quarantine Station include improvements in quarantine techniques and technical standards under the Commonwealth from 1911. Particular aspects of these improvements include the railway system (1914-1915) and the Tuberculosis Wards (1916-1918), the latter erected to cope with medical issues associated with the immediate aftermath of the First World War.

Criterion: E Aesthetic characteristics

Historic values:

North Head has been important for its symbolic image since 1788 as the entrance to Port Jackson, and was portrayed by artists such as Augustus Earle as early as 1825. In 1812 the 'Heads' were referred to

as the 'Port Jackson Heads', later as the 'Sydney Heads'. The Sydney Heads have iconic status for aesthetic values as landmarks in their own right, but equally as part of the setting for Sydney and its harbour.

The site references refer to features identified in: *Sydney Harbour National Park - North Head Quarantine Station Conservation Management Plan Volume 1: The Plan*. This was prepared for NSW National Parks & Wildlife Service, Hurstville NSW, by Peter Freeman Pty Ltd, Heritage Management Consultants, Donald Ellsmore Pty Ltd, Robert Boden & Associates, Haglund & Associates and Guppy & Associates, in April 2000.

Description:

NATURAL SETTING

North Head was formed 90 million years ago during the Late Cretaceous Period. Following rifting of the Tasman Sea and uplift of the Hornsby Plateau, stream erosion began to cut into the plateau surface. This erosion excavated the valley system now flooded by Sydney Harbour and left behind the ridges and plateau remnants forming the high ground and headlands around the harbour. There have been at least eight sea level changes over the past 700,000 years, and as a result of these changes in sea level, North Head has on various occasions formed a mesa, an island and a tied island. The main valleys of North Head are the landward extensions of these ancient valleys in the bed of Sydney Harbour. The largest valley extends from Manly Hospital to Collins Beach and is the landward extension of the palaeo valley in Spring Cove. North Head is a tied island, composed primarily of Triassic age sandstone, shale and laminite from the Hawkesbury Sandstone and Newport Formations, which are exposed in the cliffs and rock platforms from Outer North Head to Shelly Beach Headland. Two basaltic dykes, presumed to be of Jurassic age, intrude the Triassic rocks. Above the 60 m contour North Head is a plateau with a central north-south trending ridge of Pleistocene-aged dune sands up to 30 m thick. These sands are a significant aquifer; wetlands are developed where the sand deposits are shallow and where sand chokes valleys on the western side and springs rise at the boundary between the sands and the Hawkesbury Sandstone. These feed the perennial stream entering the harbour at Collins Beach, the stream at Quarantine Station and the stream flowing beside the Sewage Treatment Works. The major soil landscapes at North Head are derived from the Pleistocene dune sands and Hawkesbury Sandstone, forming sandy podsols, yellow earths, siliceous sands and yellow podsollic. Bare rock outcrops and sandstone pavements are common. Below the 60m contour, valleys and embayments have dissected the western side of the plateau while on its eastern and southern sides sea cliffs up to 90m high bound the plateau. Large deposits of blocky talus blanket rock platforms that occur at the base of most of the cliffs. North Head is joined to the Hornsby Plateau by the Holocene sand spit on which the town of Manly is situated.

North Head is a mosaic of vegetation communities that have been subject to varying degrees of human impact including clearance. The natural ecosystems have been partly protected by North Head's isolation and both fragmented and protected by its unusual history of development and management. As a consequence North Head supports a number of vegetation communities and populations that are vulnerable to further changes and disturbance.

The exclusion of fire for the past thirty years has resulted in changes to vegetation communities, with scrub communities being invaded by species favoured by the absence of fire. Approximately 460 species of vascular and non-vascular plants have been found at North Head in four vegetation communities. The coastal sandstone heath and coastal dune heath form dense vegetation thickets up to 2 m high on shallow stony soils on Hawkesbury Sandstone. The heath is dominated by sclerophyllous vegetation such as heath banksia (*Banksia ericifolia*), red bloodwood (*Eucalyptus gummifera*), smooth-barked apple (*Angophora costata*), various heath (*Epacris*) species, tea tree (*Leptospermum laevogatum*), and coast banksia (*B. serratifolia*). On the slopes and gullies, Sydney sandstone ridge-top woodland and Sydney sandstone gully forest form low woodland up to 10 metres in height, dominated by bangalay (*E. botryooides*) and smooth-barked apple. Understorey species include the tall shrub silver leaf (*Callicoma serratifolia*), and lilly-pilly (*Acmena smithii*). In these more protected areas, sweet pittosporum (*Pittosporum undulatum*) is becoming a significant environmental weed. Ninety species of birds have been recorded at North Head including the satin flycatcher (*Myiagra cyanoleuca*), black-faced monarch (*Monarcha melanopsis*), brown gerygone (*Gerygone mouki*), wonga pigeon (*Leucosarcia melanoleuca*) and the whistling kite (*Haliastur sphenurus*). At least five terrestrial mammals are present, including the brushtail possum (*Trichosurus vulpecula*), ringtail possum (*Pseudocheirus peregrinus*), and water rat (*Hydromys chrysogaster*) and there are records of seven reptiles including the common tree snake (*Dendrelphis punctulatus*) and at least four frogs including the whistling tree frog (*Litoria ewingi*).

ABORIGINAL CULTURAL LANDSCAPE

Evidence of Aboriginal use of North Head has been recorded in at least thirty-five separate locations across this landscape. Sites include rock engravings, rock shelters with deposit and/or art, open camp sites, middens and burials. Most sites are concentrated on the western, harbour-side of North Head, generally in association with the small coves and beaches, close to fresh water sources and more accessible areas.

The shell middens commonly occur in rock shelters, usually with shallow deposits. A range of rocky shore shell species have been recorded. Very little fish and marine bone and few stone artefacts have been recorded in these shelters. Implements include a shell possibly hafted onto the ends of spear throwers (one of three locations in Sydney) (Attenbrow, 2002:99), and there is possible evidence for skin working identified on stone and bone artefacts from earlier undated excavations in rockshelters at Collins Cove, North Head. At least two edge ground axes have been located at North Head, as well as a small number of stone flakes and a possible knapping floor (Attenbrow, 2002:100).

At least one burial has been located in a rock shelter on North Head, associated with shell material, and the skeleton of a child and an adult were removed from a rockshelter in the 1960's.

Both rock engravings and painted motifs occur at North Head. Engravings occur in rock shelters and on open rock platforms, and include mudoes/footprints, a fish or whale, a wallaby, circles and a shark. A source of white and reddish/brown ochre has been located on North Head. A range of other resources are available in the area which may have been used by Aboriginal people, including water (underground springs on the western side), plants, animals and marine resources. Aboriginal place names have been recorded for locations on the southern side of North Head, and include Boree, and Garungal or Car-gang-gel (Attenbrow, 2002:9).

THE HISTORIC LANDSCAPE

North Head's deep-water anchorages, rugged cliffs and landward isthmus provided an easily guarded, naturally isolated site for quarantine purposes. This sense of isolation has been reinforced by: the Catholic Church's St Patrick's Estate and the Commonwealth government's control of the area which has resulted in the persistence of most of the area's native vegetation;

- views into and from North Head, in particular from the Quarantine Station, in which little development is visible within the boundaries of the area;
- the landmark location of North Head at the mouth of Middle Harbour and the seaward entrance to Port Jackson from the Pacific Ocean; and
- the relative scale and size of North Head in the context of Sydney Harbour/Port Jackson.

The landmark values of North Head, including its scale and isolation, are reinforced by the survival of the vegetated mass and profile of the headland. The North Head Sewerage Treatment Plant is located below and to the north of the ridge and does not appear to interfere with these landmark values. As the dominant headland of the harbour, North Head was of importance in navigation from the time of the First Fleet. By 1809, navigational plans showed an obelisk in what would become the quarantine station. A ten metre obelisk (L4) still exists on this site making it potentially one of the oldest European structures on Sydney Harbour. The initial use of Spring Cove for the ship based quarantine station facilities was transferred to Quarantine Beach, Manly Cove, in 1837, where the first shore based facilities were created. Stores Beach to the north provided a separate point of entry for supplies and personnel. Although the whole of the headland was set aside for quarantine purposes, the area close to Quarantine Beach would develop as the focus of quarantine activity with functional areas strategically located on the valleys, hillsides and ridges surrounding Stores and Quarantine beaches. In the 1890s, the western boundary of the quarantine area was defined by a stone wall, modified in the 1930s, which now acts as a physical boundary to the relatively undeveloped areas of North Head, and which are also vegetated.

HISTORIC PRECINCTS

North Head comprises a number of precincts, which have been described in some detail by Freeman (2000) in the Conservation Management Plan prepared for the Quarantine Station and in a contemporary study of Defence Property at North Head.

The nominated area of North Head comprises the related Quarantine Station Precinct and Spring Cove precincts, the Parkhill Precinct, the Blue Fish Precinct (including the North Head Sewerage Treatment Plant), the related North Fort and Artillery School precincts and the Loop and Quarantine South precincts on the southern side of the headland. Integral to the use of the headland is the road which is defined at its northern end by the remains of the Parkhill Arch, which terminates at the scenic lookout and which, with the exception of Bluefish Drive, allows access to the precincts, each of which is defined by historical usage and existing cadastral boundaries. The North Head Sewerage Treatment Plant (STP) is enclosed by the Blue Fish Precinct, while the Australian Institute of Police Management is

located within the Spring Cove Precinct. The location of other features of North Head is directly indicated by the given name. The complex layering of the cultural landscape of North Head has resulted in quarantine related elements being included in Defence, Commonwealth Police and National Parks administered land.

Those aspects of North Head which are considered to be above threshold for the National Heritage List are discussed in outline in the following detailed descriptions based on Conservation Management Plans prepared by Freeman (2000) and Davies (2001) supplemented by Commonwealth, State and local government listings.

Freeman (2000) refers to the following aspects of North Head relative to the Quarantine Station Precinct: Wharf Area; Hospital and Isolation Ward Area; Third Class/Asiatics Area; First Class Area; Second Class Area; and Administrative Area. In addition, Freeman identified the Spring Cove, Parkhill, Quarantine South and Marine precincts. The detailed conservation management plan by Davies (2001) employed similar terminology but referred to the various areas in the Quarantine Station Precinct as precincts in their own right. The terminology adopted by Freeman (2000) in the North Head Quarantine Station Conservation management Plan and in the North Head Defence property report has been employed in order to address the broader landscape and heritage issues of North Head.

Quarantine Station and Quarantine South Precincts

Cultural Landscape

The landscape of the Quarantine Station Precinct and Quarantine South Precinct comprise a cultural landscape heavily impacted by human activity. The Quarantine Station Precinct has three main groups of buildings: the wharf area; the foreshore buildings; the hospital group; and the buildings on the upper slopes. As a whole the station is set in bushland with cleared areas and some re-growth. The landscape is visually important to viewers from the harbour and from other headlands and from within North Head itself. A strong element in the landscape is the conscious and enforced classification of the land, based on health issues, class and race. This includes: the isolation of the hospital, seen, but not approached from many parts of the Station; the wharf and disinfection areas, which stood as a barrier between the inmates and the main line of escape, and the administration area, which guarded the land route out; the separation of the first, second and third class passengers, with the administration area interposed between third class and the rest, imposing class distinctions within the landscape; and the clear separation of the Asian accommodation, imposing a racial layer on top of class differentiation. In addition, the cultural landscape includes cemeteries, monuments, fences, walls, boundary markers, obelisks and cairns as well as tracks, paths and roads which document the development and meaning of the Station. The approximate location of the first cemetery is at the junction of the wharf and hospital roads above Quarantine Beach (site **111A1**, c. 1837-1853). The Second Cemetery (site **L1**, 1853-1881), east of the Third Class area in the Quarantine South Precinct, retains 3 headstones in situ, while the Third Cemetery (site **VA1**, 1881-1925) is located within the School of Artillery.

The Constitution Monument (site **L9**) commemorates the quarantining of the ship *Constitution* in 1855 and the 50 year reunion of survivors of this small pox outbreak. Located above the Third Class Precinct, the memorial was completed in 1855 to commemorate the ill-fated voyage. Like the inscriptions in the Wharf Area and at the 'Old Man's Hat', located in the Quarantine South Precinct, it is one of the more obvious memorials. The iconography used by inmates, in the 1,000 plus inscriptions, memorials and gravestones, including military personnel buried in the Quarantine Station cemeteries, is important in conveying the experiences of inmates and changing attitudes to race and class. Fences and walls formed an integral part of the security and boundaries of the Station. Built in the 1930s Depression, ashlar sandstone walls show the subdivision of the Station at that time for hospital, recreation and military purposes (site **L10** south east of the Quarantine Station). Of particular importance is the single remaining cairn (site **111A3**, 1830s) denoting the line of cairns which identified the terrestrial line of quarantine at that time.

Wharf Area

Quarantine Beach, around which the Wharf area developed, was the first area to be improved to regulate the risk of disease entering the colony. The area includes the following structures and features: the sandstone and rubble wharf and timber jetty completed in its current form c. 1909. The seabed area around the end of the jetty may contain significant archaeological resources lost from quarantined ships.

A group of inscriptions is clustered on the rock outcrops and south east slope of the Area. These began in the 1830s and continued throughout the life of the Station, with inscriptions in English, European languages and Arabic and Asian languages.

- the flat of the gully leading up from the wharf area contains: the brick Luggage Store and Examination Rooms (**A14-A17**, 1914-1915); the brick Disinfection Block and Powerhouse (**A6-A7**, 1912-1920), including autoclaves installed in 1917; timber buildings containing the Formalin Inhalation Chambers

(A8, 1919) used to treat the 1918 Influenza victims; the brick Shower Blocks (A11-A12, 1912-1920) and Laundry (A9, 1912-1920). The chimney dominates the group, the uniform red brick of the group having a strong visual impact. The site of the first Doctor's Residence (site 111A2, c. 1838) has been identified on Cannae Point near the Mortuary.

- the site railway system and funicular to move luggage and supplies (1914-1915), based on a 2' 4" gauge, ran from the jetty to the escarpment via stone ramp, but is now broken at two points.
- the Cannae Point wooden Signal mast, first erected in the 1830s and restored in the 1980s, advertised incoming shipping of the quarantine conditions. Other shorter flag poles are located at Quarantine Beach and at the General Office within the Administrative Area.

Hospital and Isolation Ward Area

The exposure of the area as part of Cannae Point, selected for its windy location as a means of creating healthy conditions, has resulted in limited tree cover, with the buildings clearly visible. The buildings are clearly separated from the First and Second Class areas, with the Asiatics and Third Class accommodation located closest to the Hospital areas. The area contains rock inscriptions, some dating from as late as the 1960s.

The largest building within the area, the Hospital Ward Building (H1) is the c. 1883 timber framed, weatherboard building with encircling verandahs adapted c. 1912, when the adjacent brick Ward Building (H2) and timber Changing Block (H3), Doctor's and Nurses Block (H4), Kitchen (H5) and Assistant's Quarters (H5) were completed. A covered walkway with handrails and cross bracing links the individual buildings. The alterations to the Hospital Ward Building included Federation features such as coloured glass and stucco and strapwork to the chimneys. The Isolation Wards (H7-11), also built c. 1912, comprise a group of domestic scale, weatherboard pavilions with corrugated, asbestos cement roof sheeting to the gabled roofs.

The sites of several early buildings are situated in the Hospital Area. These include the early male and female wards, the early doctor's residence, the early cookhouse and officers' quarters.

Third Class/Asiatics Area

The Third Class and Asiatics Area is located above Quarantine Beach in the saddle area formerly known as the Healthy Ground. The saddle was one of two sites set aside for the separation of sick and healthy immigrants in 1838. The first buildings on the site formed a crescent above the present road. The site now contains a large Dormitory Block (c. 1833 P22), Kitchen and Dining Room (1912-1914 P27) and small freestanding toilet blocks for third class passengers (P28-P29) as well as a Staff Cottage (c. 1883 S9) and the three connected dormitories for Asiatic crew members with its freestanding kitchen block (1899-1900 P14-P16).

The group of buildings is usually viewed from the wharf and hospital precincts to the west; the Kitchen/Dining Rooms (P27) dominates the views as a, gabled, two-storey, weatherboard building with external, sandstone chimneys. The Dining Room retains much of the original equipment, including the kitchen dumb waiters. The three connected dormitories for Asiatic crew members with its freestanding kitchen block (P14-P16) is also of timber construction, however, the three spaces are separated by brick firewalls. The Third Class Dormitory (P22), also of timber construction, is a large bungalow style building with encircling verandahs on all sides. The large rooms have French doors leading onto the verandahs. The overriding character of the buildings stems from the Federation style architectural details employed in the stud-framed, weatherboard, rectangular forms with encircling verandahs and gabled roofs with open eaves and similar door and window openings. In all cases the buildings are supported on sandstone piers and footings.

Archaeological sites, including the positions of former structures, in the area are related to: sub-surface remains of the barracks style buildings erected in 1837; a store from the 1840s; two barracks from the 1850s; two doctor's residences from 1837; cookhouses from the 1840s-1850s; a store from the 1880s; Asiatics latrines from c. 1899; and a lock-up cell, temporary staff quarters, an early road formation and early pathways.

First Class Area

The First Class Area sits above Spring Cove at the centre of the quarantine complex. The buildings are arranged along a north-south axis formed by a central roadway which connects to the Second Class Area. Originally enclosed by a 6 foot fence, the area reached its present form by the 1890s when a Men's Smoking Room (P3), Ladies Sitting Room (P7), Meat Store (P4), Ironing Room (P36), Kitchen and Staff Quarters (P6 and P13) and telephone office, croquet lawn (P11) and other ancillary facilities such as an ablution block were completed.

A high standard of accommodation was offered to First Class passengers at sea, a factor expressed in the superior buildings (P1, P2, P5, P9 and P10) with spacious accommodation, erected in the area from

1875 in the space of a few years. These buildings, although modest in their treatment, are appropriately sited to enable views from the verandahs and cooling breezes. The planning form of the barracks provided each room with internal corridor access to a communal, end sitting room with its own fireplace. External French doors provided each room with access to the bathrooms and communal dining and recreational facilities. The Dining Room was located at the centre of building P5. The Smoking Room and Ladies Room are a matched pair of rooms with similar features and proportions to the Dining Room. The buildings and their weatherboard-lined interiors remain substantially intact. Landscape elements, such as pathways and plantings of pine trees on the south side enhance the longitudinal nature of the group.

Archaeological sites, including the positions of former structures, in the area are PV1A, PV1A3, PV1A4, PV1A5 and tennis court VA2.

Second Class Area

The Second Class Area is situated on the ridge between Store Beach and Spring Cove and includes Lyne's Buildings (Second Class Accommodation **P11**, **P12** and **P13** 1901). The simple, bungalow style barracks (P11, P12), with 22 and 14 rooms respectively, and kitchen/dining room (P13) were erected in 1901 following the outbreak of plague. Timber framed and weatherboard clad, the barracks are similar in most respects to the earlier first class buildings (1875) and to third class building P22 (1882). Less refined in their detailing, the buildings illustrate aspects of the Federation styles, although this is not strongly expressed. The rooms are similar in many respects to the first class accommodation. Building P13 differs from the barracks in the use of a hipped roof.

The only remaining stone cairn of the 1830s (site **111A3**) is located in this area in addition to some inscriptions on exposed sandstone surfaces.

Administration Area

The present Administration Area was based around the Superintendents Residence (**S6**), a weatherboard cottage erected in 1853. Other elements include the Superintendent's Office (**A1** 1911-1912), the Staff Mess (**A20** c. 1921), Stables and garage (**A24** 1911-1912) and the Recreation/Post and Telegraph Office (**A25** c. 1900) initially erected as a billiard hall. Additional Staff Cottages were added in 1870 (**S5**), c. 1883 (**S1** and **S2**), 1913 (**S12**), 1938 (**S14**) and after 1950 (**S15** and **S16**). Other staff cottages include **S4**, **S7** and **S10**.

The Superintendents Office building (A1) is a fine two-storey building with a strong architectural character. Building S5 was originally a duplex. Other buildings are essentially single-storey timber structures. Overall the area is not as homogeneous as the barracks style accommodation areas due to its topography however, the staff cottages are important in showing changes in living standards for staff. The area was out of bounds for many of the detainees and hence there is little evidence of inscriptions.

The area includes archaeological sites, including the sites of the temporary staff quarters (PV1A2), a lock-up (PV1S1) and the funicular railway station.

Spring Cove Precinct

The precinct encompasses the area where stores were brought ashore in the early days of the Quarantine Station. However, the only remaining stone cairn of the 1830s (site **111A3**) is located at the boundary with the Second Class Area. The other elements which relate to quarantine use include elements of the Seamen's Isolation Hospital (1918), now at the centre of the Australian Institute of Police Management development. In this context, although the original buildings remain in place, there has been substantial adaptation, including almost complete enclosure.

There are no inscriptions although the site of the former Boatmen's Cottage (111A8) of the 1840s is one of several sites believed to contain archaeological evidence.

School of Artillery Precinct

Includes the Third Cemetery used from 1881-1925, the Constitution Monument (1855-1905) and the sandstone obelisk (possibly 1807-1809) thought to be the oldest structure of North Head. A sandstone boundary wall (1930s) at the eastern side is an indicator of the internal separation required in the 1930s, when some areas of North Head were given over to non-quarantine uses.

North Fort and Loop Precincts

The North Fort and Loop precincts do not contain quarantine related elements.

Blue Fish and Parkhill Precincts

The Blue Fish and Parkhill Precincts do not contain quarantine related elements other than the remains of stone boundary walls erected in 1897 and in the 1930s.

Historic Archaeological Sites

Wendy Thorp's work (1988 updated 1992) has been identified by Davies (2001) as the most comprehensive and up to date assessment and survey to date. This covered the areas managed by National Parks and Wildlife Services and included some 48 known sites and some 47 potential sites. Freeman (2000) states that since 1992 a number of the potential sites have been confirmed by above ground evidence. However, the location, names and nature of these additional sites has not been provided. Within the Quarantine Station archaeological sites include: demolished buildings and structures; movable heritage; archaeological deposits and scatters, including sub-floor deposits; cemeteries and inscriptions. Some of these have been identified above.

For a complete description of aspects relating to quarantine refer to the conservation management plans by Freeman (2000) and Davies (2001 as amended to 2005).

History:

The Aboriginal landscape

The *Gayamaygal* people occupied the northern areas around Port Jackson when the first Europeans entered Port Jackson (Attenbrow, 2002:24-25).

Some of the early interactions between Aboriginal people and colonists of the First Fleet occurred in the North Head area. In June 1788 Bradley recorded sighting 'on the pitch of the N. Head' a man under the overhanging cliff, who assisted in giving directions, and men carrying 'a quantity of shellfish in a net' on North Head which they offered to Bradley (Attenbrow, 2002:82). In December 1788, Arabanoo, a young Aboriginal man, was captured from Manly Cove and, under restraint, lived in a separate hut in the yard of Government House (McBryde, 1989:9). He told the colonists much about the life and customs of his people during the four months of captivity before he died of smallpox (Tench, 1793:14, in Attenbrow, 2002:14). In November 1789, two more Aboriginal men, Bennelong and Colbee, were captured in the northern cove (McBryde, 1989:11). Although later escaping, this was the start of a long association between both men and the colonists. Bennelong later became a well known figure in the early settlement, frequently staying at the Governor's house when he visited (Attenbrow, 2002:15). Other interactions, such as a whale feast and the spearing of Governor Phillip, were recorded to the north of North Head at Manly Cove (Lee, 2003:19 from Bradley, 1786-92:121; Tench, 1793:54).

There are also early historical accounts of the rock engravings in the general North Head area and their possible meaning. George F. Angas visited Sydney in 1844, and sought information on engravings from Old Queen Gooseberry (who was camping near Camp Cove). She accompanied Angas to several places near North Head and told him all she knew. Although little was recorded, she said that no-one lived on engraving sites and that 'mystic dances or festivals' were held on these areas as well as fights and dances (Attenbrow, 2002:135).

The First Fleet and Port Jackson

The arrival on 28 April 1770 at Botany Bay of Lieutenant James Cook would lead to the provision of information, which became the basis for the mapping and colonization of Australia by the British. Before leaving the bay Cook ordered an inscription to be cut on a tree close to where they had watered, setting forth the ships' name and date, 6 May 1770. Almost at once after they had departed they sighted safe anchorage, naming it Port Jackson (Hough, 1994). Cook claimed eastern Australia, at Possession Island, Torres Strait/Cape York, for Britain in 1770, after mapping the eastern coastline. As the first European discoverer, and carrying a regular commission to do so, Cook was able to claim this terra nullius for his sovereign (Frost 1994). As Cook wrote, 'We are to Consider that we see this Country in the pure State of Nature, the industry of man has had nothing to do with any part of it' (Frost, 1992).

Hughes (2003) and other authors have discussed the importance of Britain maintaining its geo-political presence in the Pacific in the face of French exploration. Sir James Harris reported to William Pitt in 1786 that no time should be lost in augmenting British Naval and Land Force in the southwest quarter of the Pacific. According to historians such as Frost and Blainey, such strategic outlier arguments led to Botany Bay. Pine trees and flax, to be found in the Pacific region, were a mainstay of shipping, providing sails, masts and spars. In 1786 a proposal was put to Pitt to colonise Botany Bay for the purpose of 'effectively disposing of convicts'. The First Fleet, which arrived in Australia in 1788, was designed to serve both official purposes.

The First Fleet, under Captain Arthur Phillip, arrived at Botany Bay on 18 January 1788 (Berzins, 1988). In a letter of 3 July 1788 Captain Phillip informed the Marquis of Lansdowne in England of the reasons for the move to Sydney Cove. In addition to the poor quality of the land for agriculture it was particularly noted that Botany Bay offered 'no security for large ships' while Port Jackson offered room for 'a thousand Sail of the Line... in perfect security' (PICMAN database State Library of NSW MLMSS 7241: filed at safe 1/234). Phillip began to transfer his fleet to Port Jackson on 25 January 1788, raising the British flag at Sydney Cove on 26 January 1788, before formally taking possession.

Although the original and final sailing instructions to Arthur Phillip have not been found in any archive, an earlier edited version has survived (Public Records Office London 20 April 1787 Co 201/1 ff 29-45v). The instructions, composed by Lord Sydney, were from George 111, with the advice of the Privy Council. The instructions designated Phillip as Captain General and Governor in Chief of NSW and advised Phillip about managing the convicts, granting and cultivating the land and exploring the country. The Aborigines' lives and livelihoods were to be protected and friendly relations with them encouraged, but the instructions made no mention of protecting or even recognizing their lands. It was assumed from the time of Cook that Australia was terra nullius; that is land belonging to no one (refer to Historical Records of NSW, Vol 2 Part 2, for more detail).

The area of Manly Cove [Bay], in particular Collins Beach, is associated with First Fleet contact with Aboriginal people. On 22 January 1788 Captain Phillips named the area Manly after the 'confidence and manly behaviour' of the natives, during his exploration of Port Jackson from 21-24 January 1788. In May 1788 a final attempt was made to engage with the Indigenous people. On 31 December 1788 attempts were made to kidnap people at Manly Cove by Lieutenants Ball and Johnston. The first captive, Arabanoo, died from smallpox on 18 May 1789. Colby and Benelong were also probably taken at Manly Cove, according to various sources, including the accounts of Watkin Tench. Captain Phillip was speared at Manly Cove on 7 September 1790, the same day that a 'whale feast' was witnessed (Flannery 1996: 95, 137; Blackmore, 1986 Vol 2: 83-86; and Freeman 2000 Vol 1:8, 35-36). A stone monument, now lacking its inscriptions, stands above the steps to Collins Beach. Collins Beach may have been where the spearing took place.

The development and use of North Head has been influenced by its relative isolation from Sydney and its physical environment. This isolation slowed development of the area, although by 1810, the first land grants had been made to Richard Cheers and Gilbert Baker adjacent to Manly Cove. A navigational obelisk was erected on the western side of North Head c.1809 to assist in navigating the entrance channels to the port (Blackmore, 1986 Vol 2: 86-87). With European occupation of Australia, the Sydney Heads became the entrance to one of the world's greatest harbours, Sydney Harbour. The central role of Port Jackson in the life of the colony of New South Wales led to the harbour and its landmarks being portrayed by artists, photographers and cartographers, including Augustus Earle (c. 1825), from the early years of settlement and into the twentieth century. Both the North and South Heads have played an important role in the cultural and military life of the colony of NSW. The isolation of North Head and Manly at the entrance to Port Jackson would result in its use for quarantine and religious purposes, coastal defence and other military uses as well as uses associated with the growth of Manly in the late nineteenth and early twentieth centuries.

Quarantine Station

A proclamation of quarantine was enacted at Port Jackson in response to the New York yellow fever epidemic of 1804. However, matters of public health lacked any real administration. North Head was first used as a stopgap, quarantine measure against typhoid in 1828, following an earlier whooping cough outbreak. The isolation and strategic role of North Head was recognised in 1828 when the first vessel, the *Bussorab Merchant*, was quarantined at Spring Cove. The Quarantine Act of 1832, based on a British Act of 1825 and the result of the cholera epidemic of 1830 in Europe and the unwillingness of free vessels to comply with ad hoc quarantine processes, led to the establishment in 1832 of a Quarantine Station at Spring Cove by Governor Darling. This was the first officially designated site in Australia (Blackmore, 1986 Vol 2: 89-90). In 1833 Governor Bourke proclaimed the land within a quarter of a mile of Spring Cove a quarantine station. However, in 1837 the quarantine area was extended from Spring Cove to cover the whole of North Head up to the boundary with Richard Cheers grant at Manly Cove and a cemetery created at the head of Spring Cove Gully. From 1837 ships anchored at Spring Cove for cleansing after disembarking their passengers into quarantine. In 1837 the Quarantine complex was moved to Quarantine Beach from Spring Cove, with the construction of permanent buildings to replace the practice of quarantining sick people aboard their vessels. A signal mast at Cannae Point was used from the 1830s to signal shipping of quarantine conditions at the Quarantine Station. A series of stone cairns marked the boundary of the Quarantine Station from the 1830s. By 1838 there was a great increase in shipping resulting in the appointment of a Health Officer for Port Jackson. The renewal of immigration in 1847-1848 led to review of quarantine facilities and the recommendation that new facilities should be erected, including kitchens, privies separate wards and shelter shed at the wharf. The *Beejapore* arrived in 1853, carrying over 1,000 passengers. Some 62 passengers subsequently died at Spring Cove's over-stretched quarantine facilities, which were only designed to cater for 150 people. An extensive building program commenced in 1853, a result of increased immigration in response to the discovery of gold in 1851. New quarantine stations were also opened at Newcastle (1850) and Moreton Bay (1852) to supplement that at Melbourne, opened at Hobson's Bay in 1840.

At North Head, the original cemetery close to the beach was levelled and the markers moved to higher ground, thus removing the burials from the view of the Healthy Ground. Quarters were also built for the Superintendent (Freeman, 2000 Vol 1: 46-47, 55-56, 90-91). In 1855, the ship *Constitution* sailed

through the Sydney Heads on 24 May 1855 after a voyage of 98 days from Southampton. Of the 375 passengers, fourteen died with an outbreak of smallpox. Quarantined for 2 months, six of the passengers carved a stone obelisk in memory of their shipmates. In 1905, 27 survivors met at the Station to mark the 50th anniversary of the ill-fated voyage. Two marble tablets were added to the obelisk in 1905. The arrival in 1872 of the *Hero*, which required quarantine for smallpox, and the 1881 smallpox epidemic, resulted in an increasingly segregated layout based on class, race and disease, following the appointment of a Royal Commission in September 1881. A light tram, reservoir, better cleansing facilities, hospital accommodation and stricter zoning, including a separate Asiatic area, in response to requests from the Shipping Owners Association, were implemented after 1882 by the newly appointed Board of Health. The new Board was also responsible for the city of Sydney. The treatment of infected people was now managed in conjunction with the new Coast Hospital (Prince Henry) at Little Bay. From 1885 the role of Health Officer in the management of the Quarantine Station was replaced with that of the Principal Medical Inspector of the Board of Health. By 1889 there was accommodation for 300 people in timber buildings with stone foundations, in several enclosures, and platforms had been built for the erection of tents as overflow accommodation. The hospital could house 60 patients, and a steam laundry was in operation as were a baggage disinfector and baggage store. Communication with Sydney was by telephone and telegraph. By 1895 a new two-ward hospital had been erected and by 1897 a rubble boundary wall, 8 feet high, was erected at the boundary with the land granted to the Roman Catholic Church. Dedicated Asiatic accommodation was erected in 1902 (Freeman, 2000 Vol 1). Land clearance associated with the Station made the area visually distinctive from the harbour, heightening the sense of isolation. The Quarantine Station came into use for a domestic, public health, emergency during the Sydney plague epidemic of 1900. In 1900, 264 plague cases and 1,832 contacts were quarantined from January to August of that year. One hundred and forty victims of plague were buried in the third burial ground, including forty-eight, who died in Sydney. As the first of 10 outbreaks of plague between 1900 and 1922, the outbreak led to the erection of new accommodation at North Head. The Second Class Area, situated on the ridge between Store Beach and Spring Cove includes Lynes Buildings (Second Class Accommodation P11, P12 and P13) erected in 1901 following the outbreak of plague. However, from 1902 plague carriers and contacts were housed at the Coast Hospital. Earlier, in 1899, the NSW Government Board of Health had given permission for the inoculation of animals for experimental purposes, with plague horses stabled above Quarantine Beach (Freeman, 2000 Vol 1).

From the 1880s it had been clear that effective quarantine, on a cooperative basis, was required by the states, as were common postal services and a common defence. Quarantine and Defence were both vested in the Commonwealth Government in 1901. In 1904 it was agreed by the states and Commonwealth that a Commonwealth Director-General for Quarantine would be appointed, but that quarantine in each state would be administered by the State's chief health officer, with delegated authority.

In 1909 the Commonwealth assumed technical responsibility for the Quarantine Station following the Quarantine Act 1908. However, the states were empowered to use Commonwealth quarantine facilities in special circumstances, although the Commonwealth remained responsible for dealing with cases of communicable diseases. In 1912 the Commonwealth's Director of Quarantine, Dr W. P. Norris, inspected and reported on the world's best quarantine practices. Transferred to the Commonwealth in 1911, recommendations in 1912 resulted in the construction of new facilities including new arrival and cleansing facilities, including a boiler house, isolation and dormitory blocks, an additional tramway system, and kitchen and bathing blocks. By 1913 relations between the State and the Commonwealth were at breaking point. Between July 1913 and January 1914, 1,402 people were quarantined for smallpox, with a maximum of 309 housed at the Quarantine Station at the peak of the epidemic. During the epidemic the Commonwealth acted unilaterally, declaring Sydney a quarantined area. The effectiveness of this approach was tested during the influenza outbreak after the First World War. Tuberculosis wards were set up 1916-1918 to deal with infected servicemen returning from the First World War. In 1918 the worldwide influenza epidemic reached Australia; between 1918-1919, over 110 ships were moored at Spring Cove with 70 people dying from influenza. The Seamen's Venereal Diseases Hospital was erected 1916-1920 adjacent to Spring Cove. The inability of the existing quarantine service to control the influenza outbreak led in 1921 to the formation of the Commonwealth's Department of Health. By the 1920s the Quarantine Station could accommodate 1,208 persons and had reached its current form (Freeman, 2000 Vol 1).

During the Second World War the Quarantine Station became a military establishment occupied by troops in transit and prisoners of war awaiting detention. The Quarantine Station remained in use for quarantine purposes until the 1970s. In 1974 the buildings were used to house 217 Darwin refugees after Cyclone Tracey and in 1975 the station housed 100 Vietnamese children. The advent of air transport resulted in changes to the Quarantine Station from 1957 with the loss of structures and re-roofing of buildings. The effective eradication of smallpox worldwide and the dominance of air transport led to the closure of the Quarantine Station in 1977 (Freeman, 2000 Vol 1). More than 13,000 people were quarantined at North Head of whom 572 died and were buried there. Between 1828 and 1984 at least 580 vessels were quarantined at the Quarantine Station (Freeman, 2000 Vol 1).

In 1984 the North Head Quarantine Station was returned to the NSW Government, to be managed by the National Parks and Wildlife Service (NPWS). Other land acquired by the NSW NPWS included the North Head Sydney Harbour National Park Reserve in 1979.

In 1960, the former Seamen's Isolation Hospital at Collins Flat, used as a Migrant Hostel in the post-war years from 1949-1953 by the Department of Immigration, and under resumed Army occupation from 1953, was adapted for use as the Commonwealth Police Training College, now the Australian Institute of Police Management. The predecessor of the Australian Federal Police and the Commonwealth Police was the Commonwealth Investigation Service. In 1954, Mr Ray Whitrod, Director of the Commonwealth Investigation Service, suggested that an Australian Police College be established for senior officer training for all Australian jurisdictions. The land included nine acres around the buildings and a further 12 acres adjoining on the ridge extending to Store Beach and the jetty. The Army handed over the Collins Flat site in July 1957. The initial title of the institution was 'Commonwealth Police Training Depot'. In October 1961 the Depot was officially renamed the Australian Police College (Australian Archives AA SP 857/11 Item PS/412).

Secular and Religious Development

The eastern boundary of Cheers grant of 1810 formed the boundary of the Quarantine Station. Although isolation had slowed settlement, the area was only two hours from Sydney by land and sea. Land speculation in the Manly area began when Thomas Whistler Smith produced plans for a Marine Retreat in 1853. Smith made arrangements for a regular ferry service in 1855 to ensure the success of his ventures. By 1860 Manly had begun to compete with other favoured places, such as Watson's Bay, with hotels and boarding houses (Blackmore, 1986 Vol 2).

In 1859 the Catholic Church acquired 60 acres adjoining and including part of the Quarantine Station reserve. Although the transaction was not finalised until 1879, the conditions of sale included the construction of an ecclesiastical seminary and a stone-wall, erected c.1880, separating it from the Quarantine Station. The isolation of the site, yet proximity to Sydney, was seen as ideal for educational purposes as well as for a religious retreat by the Catholic Church. Plans for St Patrick's College, which was to be the largest Catholic Seminary in the southern hemisphere, were drawn up by Sydney architects Sheerin and Hennessy under Cardinal Patrick Moran's influence in 1885. St Patrick's College opened in 1889, although a Cardinal's Palace had been completed earlier in 1886. In 1886 in exchange for a small public reserve at Cabbage Tree Bay, the Catholic Church was granted 22 acres of land in the Quarantine Reserve, and a sandstone wall was erected along the new boundary. In 1993 Cardinal Edward Clancy decided to move clerical studies away from the Manly seminary, ending its traditional use (Blackmore, 1986; Clive Lucas et al, 1997: pp. 41-42).

By the 1880s Manly was the pre-eminent watering place (recreational) for the Colony. In 1914, Darley Road was constructed through Catholic Church land, with flanking stone-walls, to connect with the Quarantine Station. A second residential boom period peaked in Manly following the opening of the Spit Bridge in 1927. In 1929 the Commonwealth Government granted permissive occupancy over 300 acres of North Head for public use. This was conditional on Manly Council building a stone-wall to isolate the Quarantine Station. Parkhill Reserve, comprising the whole of the headland outside the Quarantine Station, was opened in 1933 as a public reserve. The cobbled Memorial Drive, stone-walls and Parkhill Arch were built between 1931 and 1933; the reserve was named after local dignitary Sir Archdale Parkhill (Freeman, 2000). The two storey brick Manly Peace Hospital was established in the 1930s on land granted in 1917 by the Commonwealth for the construction of a cottage hospital. Comprehensive street tree plantings were made in the 1930s. Palms (*Washingtonia robusta*) were planted as an expression of public taste outside St Patrick's College with similar plantings at the Quarantine Station (Blackmore, 1986).

A scheme for the construction of the northern suburbs ocean outfall sewer at Blue Fish Point, North Head was prepared in 1914, with construction commencing in 1916. The sewerage scheme serviced the areas of Manly, Mosman, North Sydney, Lane Cove, Hunters Hill, Ryde, Ermington, Rydalmere, Dundas, Parramatta, Baulkham Hills and Blacktown. The scheme was completed in 1928, but in 1972, the North Head Sewerage Treatment Works was upgraded to provide a treatment works (Water Pollution Control Plant) at the North Head outlet; this was later upgraded for the deepwater ocean outfall scheme of the 1990s (AHDB RNE place 1/13/024/0019, North Head) and is currently known as the North Head Sewerage Treatment Plant.

Military Uses

Traditionally the first threats of invasion were seen as coming from the sea, with inner and outer lines of defence established at Sydney Cove and at Middle Head by 1801. Various schemes for the defence of Sydney and Port Jackson were proposed throughout the nineteenth century, with an outer line of fortifications completed at Bradley's Head, South Head and Middle Head; at Middle Head fortifications

were begun as early as 1873 under Colonial Architect James Barnet. However, it was not until the Second World War that North Head became part of Sydney's coastal defences.

In 1934 the Commonwealth withdrew permissive occupancy by Manly Council in anticipation of the fortification of the headland for coastal defence. Two 9.2 inch guns had been purchased for installation at North Head in March 1934. Construction of North Head Fort (concrete gun emplacements, magazines, engine room, pump chambers, tunnels and plotting room) was completed in 1936, by the civilian firm of McConnell, as were the Command Post and battery Observation Posts. The guns were capable of targeting shipping in Botany Bay and Port Hacking. These guns were to be supported by the six-inch batteries at South Head. North Head was to play a role in the defence of Sydney Harbour under Australian troops. An artillery barracks complex, completed between 1933 and 1938, was used as the Headquarters of the Australian Coast Brigade with barracks for personnel manning the coastal fortifications at North Fort and Bluefish Point erected between 1935 and 1936. The main barracks complex, the North Head Fort barracks Group (the Artillery Barracks) was completed between 1936 and 1937, below the highest point of North Head. The new quarters were the largest barracks erected in Australia in the Inter-war years. Cottages were also completed for the Battery Commanders as well as four cottages for the NCOs. A second barracks complex was also completed within the Quarantine Station Reserve. The 1st Heavy Brigade moved its headquarters to North Head in 1938. The first Australian land-based radar station was established at Blue Fish Point in 1941, during the Second World War, protected by an anti-aircraft battery and searchlights (Freeman, 2000 and Schwager Brooks, 1996). Before 1940 the entire Sydney Defence had been commanded from the North Head Barracks, but after the declaration of war, in 1939, command was transferred to Dover Heights (Freeman, 2000 and Schwager Brooks, 1996).

After the Second World War the permanent barracks complex became the School of Artillery in 1953. The School remained a crucial component of the basic individual training of officers, NCOs and gunners in the 1970s and 1980s. However, in 1960 the North Fort guns and other equipment were removed. Although remaining in use, the physical limitations of the site would eventually bring about the relocation of the artillery function. In 1979 the Commonwealth/State Foreshores Agreement provided for the exchange of certain State and Commonwealth lands and in December 1989 the artillery directorate was transferred to Canberra. The School of Artillery was relocated to Puckapunyal in Victoria in 1997-1998 (Freeman, 2000 and Schwager Brooks 1996).

The North Fort is now in use as the Royal Australian Artillery (RAA) Museum (from 1990) and remains in Defence hands, while the Artillery Barracks complex is managed by the Sydney Harbour Federation Trust, as part of former defence lands in Sydney Harbour, before it is returned to the State of NSW.

Condition and Integrity:

Quarantine Station

For condition and integrity refer to the *North Head Quarantine Station Conservation Management Plan* (Freeman 2000) and the *Detailed Area Conservation Management Plan* (Davies 2001 updated to 2005).

Natural Values

The vegetation of North Head is in variable condition, with some areas, particularly those at the edges of small communities, being in poor condition. Dieback has significantly affected bangalay in the woodland areas facing Spring Cove.

Weed invasion has affected many areas with lantana, morning glory, asparagus fern and coral tree being the most conspicuous weeds. Pampas grass has invaded along drainage lines from the School of Artillery. Tramping by visitors and military vehicles has had a significant effect on some sensitive communities, particularly heaths on the eastern side of the headland.

The sand dunes at North Head have been disturbed by roads and development associated with the Quarantine Station and School of Artillery. However a significant portion of the dune area remains undisturbed and covered by natural vegetation.

Geological formations at North Head are in good condition and are generally robust and under little threat from existing or likely future landuse. Some features, however, are less robust and could be easily degraded, notably the dunes forming the centre of North Head. Similar formations elsewhere in the Sydney area have been destroyed or heavily modified.

North Head is an isolated island environment susceptible to further disturbance. Plant communities on the dunes and on shallow soils on the Hawkesbury Sandstone are particularly vulnerable to disturbance by development, vehicles and earth moving, including the development of roads and service easements.

The isolation and small size of many of the plant communities and the fauna population make them particularly vulnerable to localised extinction through wildfire, urban development, disease, predation by domestic pets and road kills. Despite a dramatic decline in the 1950s, the penguin colony now appears to be recolonising the shoreline below the Police College.

The condition and integrity of North Head was last assessed in the period 1999-2000.

Location:

About 277ha, at Manly, comprising the whole of the headland, to Low Water, south of a line commencing at Low Water north of Collins Beach on the alignment of the north-west boundary of Lot 2763 DP752038, then easterly via that alignment and boundary and then following the north-westerly boundaries of Lot 2774 DP752038 Lot 2728 DP752038, Lot 2764 DP752038 and Lot 2763 DP752038 to the most northerly point of Lot 2763 DP752038, then generally easterly via the north-east and northern boundaries of Lot 2763 DP752038 and the alignment of the latter segment to Low Water. Excluded is the North Head Sewage Treatment Plant being the whole of Lot 1 DP604428.

Bibliography:

Historic

- Aird, W. V., 1961, *The Water Supply, Sewerage and Drainage of Sydney*, Sydney.
- Australian Archives (AA SP 857/11 Item PS/412)
- Australian Heritage Data Base (AHDB) October 2005
- Australian Heritage Places Inventory (AHPI) October 2005
- Australian Institute of Police Management (AIPM) October 2005
- Australian National Shipwreck Database (DEH) October 2005
- Banks' Journal (1770)
- Berzins, Baiba, 1988, *The Coming of the Strangers*, Collins Australia, State Library of NSW
- Blackmore, K., *Heritage Study Municipality of Manly*, 1986
- Charles, L., 1988, *Carved into history, Images of quarantine at North Head*, National Parks and Wildlife Service, Sydney.
- Clouston, (draft) *North Head Planning Strategy*, 1996
- Cook's Journal (1770)
- Davies, Paul, Pty Ltd, 2001, *Sydney Harbour National Park – Quarantine Station detailed area conservation management plan* (amended to 2005), for Department of Environment and Conservation (NSW)
- Deakin University, 2005, *Australians at War*, a thematic study for the AHC and DEH.
- Dusting, R, CMP, *Torrens Island Quarantine Station*, Works Australia for Australian Estate Management, 1996.
- Flannery (edit), Tim, *1788 Watkin Tench*, The Text Publishing Co, Melbourne, 1996)
- Foley, J.D., 1995. *In Quarantine: A History of Sydney's Quarantine Station 1828-1984*. Kangaroo Press. Kenthurst.
- Freeman, P, and McLaren, P, *North Head Heritage Assessment*, for Sydney Property Disposal Unit, 1999
- Freeman, Peter, Pty Ltd, Donald Ellsmore Pty Ltd, Robert Boden & Associates, Halgund & Associates, and Guppy & Associates, 2000. *Sydney Harbour National Park North Head Quarantine Station conservation management plan*, volume 1. Prepared for NSW National Parks and Wildlife Service.
- Frost, A., 1998, *The Voyage of the Endeavour*, Allen and Unwin, St Leonards.
- Frost, A., 1992, Old Colonisations and Modern Discontents: Legacies and Concerns, Chapter 11 in *Proceedings of the Inaugural Conference of the Samuel Griffiths Society*.
- Frost, A., 1994, *Botany Bay Mirages, Illusions of Australia's Convict Beginnings*, MUP, Carlton, Victoria.
- Hough, R., 1994, *Captain James Cook*, Coronet Books, Hodder and Stoughton, London.
- Hughes, R., 2003, *The Fatal Shore*, Vintage.
- Lucas, Stapleton & Partners, *St Patrick's Estate at Manly NSW*, 1997.
- Manidis Roberts Consultants, *North Head Quarantine Station Proposal for the Conservation and Adaptive Re-Use*, for Mawland Hotel Management Pty Ltd, 2001.
- National Parks and Wildlife Service N.S.W., 1988. *Sydney Harbour National Park Quarantine Station Conservation Plan*. Sydney. National Parks & Wildlife Service.

National Parks and Wildlife Service N.S.W., 1992. *Quarantine Station: a conservation plan*. Sydney. National Parks & Wildlife Service.

National Parks and Wildlife Service N.S.W., 1996. *Sydney Harbour National Park; Draft Plan of Management*. Sydney. National Parks & Wildlife Service.

NSW Heritage Inventory, October 2005.

NSW Heritage Office Maritime Heritage Online, October 2005.

PICMAN database State Library of NSW.

Power, S. M., *Maritime Quarantine and the former Quarantine Station, Point Nepean*, for Department of Administrative Services and the Australian Heritage Commission, by Department of Housing and Construction, Victoria-Tasmania Region, 1984.

Public Records Office, London, October 2005.

Schwager Brooks and Partners, *North Head School of Artillery and RAA Museum, Sydney Fortress Sites at North Head Survey and Recommendations*, 1996

Sydney Harbour Federation Trust, *The Plan North Head*, 2003

Tanner, Howard, & Associates, *St Patrick's Estate Manly Conservation Plan*, 1994

Town and Country Journal, Sydney.

Natural

Australian Heritage Assessment Tool, 2004. *Analysis of presence of JAMBA/CAMBA listed birds around Australia*.

Australian Heritage Commission, 2002. *North Head, Manly NSW. Register of the National Estate database entry*. www.ahc.gov.au

Benson, D. & Howell, J., 1990. *Taken for Granted, the Bushland of Sydney and its Suburbs*. Kangaroo Press and Royal Botanic Gardens, Sydney, 1990.

Burrows, S.E. 1997. *Dieback in Eucalyptus and Angophora at North Head*. Sydney, University of Sydney, Grad Dip Sc(Environmental) thesis unpubl.

Chapman, G.A. & Murphy, C.L., 1989. Soil Landscapes of the Sydney 1: 100 000 Sheet. Soil Conservation Service of New South Wales.

Conaghan, P.J., 1980. *The Hawkesbury Sandstone: Gross Characteristics and Depositional Environment*. in C. Herbert & R. Helby, (eds.) *A Guide to the Sydney Basin*. New South Wales Geological Survey of New South Wales, Bulletin. 26: 188-253.

NSW Threatened Species Conservation Act 1995

Department of Environment & Heritage, 2004. *Eastern Suburbs Banksia Scrub*. Ecological Community Recommended for Listing in Schedule 2 of the Endangered Species Protection Act 1992. <http://www.deh.gov.au/biodiversity/threatened/communities/east-suburbs-banksia.html>

Department of Environment & Heritage Species Profile & Threats Database (SPRAT) 2005 <http://intranet.deh.gov.au/cgi-bin/sprat/internet/showdistmap.pl>

Fairley, A. & Moore, P., 1989. *Native Plants of the Sydney District. An Identification Guide*. Kangaroo Press in assoc. with The Society for Growing Australian Plants – NSW Ltd.

Herbert, C. 1980. *Narrabeen Group at North Head. Port Jackson*. Quarterly Notes of the Geological Survey of New South Wales. 39:1-7.

Herbert, C., 1983. *Sydney Basin Stratigraphy*. in C. Herbert. (ed) *Geology of the Sydney 1:100.000 Sheet 9130*. Geological Survey of New South Wales, Department of Mineral Resources, Sydney, 8-34.

Herbert, C. & West, J.L. 1983. *Sydney Geological Series Sheet 9130 (Edition 1)*. New South Wales Department of Mineral Resources, Sydney.

Hochuli, D., 1999. *North Head National Estate Nomination. Natural Heritage Values of North Head*. Prepared for Manly Council. Report 3.

Horton, S. 1986. *A vegetation study of North Head*. Community Employment Programme.

Horton, S. & Benson, D.H. 1987. *Decline of Eucalyptus camfieldii at North Head, NSW*.

Jackson, N. & Abrahams, H. 1999. *Draft North Head AHC Nomination*. Report to Manly Council. Clive Lucas, Stapleton & Partners Pty Ltd.

Macleay, W.S. 1842. *Notice of a new genus of Mammalia discovered by J. Stuart, Esq., in New South Wales*. The Annals and Magazine of Natural History. 8(51): 241-243.

Nominator 2004. Nomination of North Head for national heritage listing. Submitted to DEH June 2004.

N.S.W. National Parks & Wildlife Service, 1988. *Sydney Harbour National Park Quarantine Station Conservation Plan*. Sydney. National Parks & Wildlife Service.

N.S.W. National Parks & Wildlife Service, 1998. *Sydney Harbour National Park. Plan of Management*. National Parks & Wildlife Service, Sydney, NSW.

Osborne, R.A.L. & Osborne, P.L., 1999. *North Head National Estate Nomination. Geoheritage Values of National Estate Significance at North Head*. Prepared for Manly Council. Report 2.

Percival, I.G., 1979. *The geological heritage of New South Wales: a report prepared for the Australian Heritage Commission and the Planning and Environment Commission of New South Wales*. National Estate Study Report, NSW.

Percival, I.G., 1985. *The Geological Heritage of New South Wales, Volume 1*. Published on behalf of the Geological Sites and Monuments Sub-Committee of the Geological Society of Australia (New South Wales Division). National Parks & Wildlife Service, Sydney.

Peter Freeman Pty Ltd, Heritage Management Consultants, Donald Ellsmore Pty Ltd, Robert Boden & Associates, Haglund & Associates, and Guppy & Associates, 2000. *Sydney Harbour National Park - North Head Quarantine Station Conservation Management Plan. Volume I: The Plan*. Prepared for NSW National Parks & Wildlife Service, Hurstville NSW, April 2000.

Roy, P.S. 1983. *Quaternary Geology*. in C. Herbert. ed *Geology of the Sydney 1:100,000 Sheet 9130*. Geological Survey of New South Wales. Department of Mineral Resources. Sydney. 41-9 1.

Travers Morgan Pty Ltd, 1986. Study 1: Sydney and Middle Harbour Regional Environmental Study and Plan-Ecological Aspects.

Wells, R., 2004. *Notes on the Red-crowned Toadlet Pseudophryne australis (Gray, 1835) - an endangered frog from the Sydney Basin of New South Wales*. www.liasis.net/ebooks/pseudophryne.pdf

Yeates, A.N., 2001. *An Assessment of Australian Geological Sites of Possible National or International Significance. Volume 1: Rocks and Landforms*. Report for the Australian Heritage Commission, August 2001.

Indigenous

Attenbrow, V. and Conyers, B. 1983 North Head Quarantine Station archaeological survey for Aboriginal sites; Report to NSW National Parks and Wildlife Service.

Attenbrow, V. 2002 *Sydney's Aboriginal past: Investigating the archaeological and historical records*, UNSW Press.

Darwala-Lia, 2001 The community approach to recording Aboriginal heritage: a case study at North Head, Sydney Harbour National Park, NSW.

Department of Environment and Conservation (NSW) Aboriginal Heritage Information Management System (AHIMS), Search for North Head, Sydney, 9 September 2004.

Elkin, A. P. 1978 Aboriginal men of high degree, *Helen Vale Fdn J.* - - 1978; 2(4); 24 – 35 (AIATSIS)

Howitt, A. W. 1996 (1904 reprint) *The Native Tribes of South East Australia*, reprinted by Aboriginal Studies Press, AIATSIS, Canberra.

McBryde, I., 1989, *Guests of the Governor, Aboriginal Residents of the First Government House*, Friends of the First Government House Site.

Appendix 5 – Commonwealth Heritage Listing

North Head - Sydney, North Head Scenic Dr, Manly, NSW, Australia

Summary Statement of Significance:

The North Head Artillery Barracks erected from 1935, also known as the School of Artillery, are individually significant within the area of North Head, which is listed in the RNE at file no. 1/13/24/19. The site is associated with three phases in the occupation of North Head: the Quarantine Station 1833-1930; for public recreation 1930-1934; and for defence purposes from 1934 to 1998. The New Quarantine [Station] Cemetery is listed separately in the RNE at File no. 1/13/24/9. The stone walls defining sections of the boundary are associated with recreational use of North Head from 1929. North Fort, listed in the RNE at file no. 1/13/24/5, is closely associated with the development of the Barracks from 1935.

The Artillery Barracks are important in illustrating the implementation of Defence policy in the inter-war years before the onset of the Second World War in 1939. The functional zoning and planning illustrate the continuity of Defence's cultural and social organisation reflected in Commonwealth defence complexes such as the Royal Australian Naval College, 1913-1915, at Jervis Bay. The use of a fashionable architectural style and permanent construction illustrate the influence of the prevailing Art-Deco style on Commonwealth architects and the Commonwealth's intention to provide modern, permanent buildings in the defence of Australia. This pattern is seen in other major defence projects of the late 1930s and early 1940s. The permanent nature of the complex and the quality of its planning and architectural design confirm its importance as the Headquarters of Coastal Defence until 1940, and as a barracks of the modern era in the context of urban Sydney. The design and planning clearly continue the Colonial barracks concept established at Victoria Barracks in 1842, and which in turn reflected British design precedent.

The Artillery Barracks is important for its association with the Coastal Defence of NSW from 1939 to 1945 as part of the Sydney Fire Command and for its use as the School of Artillery between 1946 and 1998. (Criterion A.4)

(Australian Themes: 7.7 Defending Australia, 8.10 Pursuing excellence in the arts and sciences)
The Artillery Barracks are important as a rare example of a permanent military Barracks establishment of the immediate pre-Second World War period. (Criterion B.2)

The planning and formal nature of the Artillery Barracks, and the use of Art Deco and Georgian Revival forms, are important in illustrating the principal characteristics of Defence culture and social structure during the Inter-War years in addition to the prevailing use of contemporary architectural style and idiom by Commonwealth architects. (Criterion D.2)

The Artillery Barracks are important in illustrating the restrained, relatively rare use of the Inter-War Art-Deco style in the years leading up to the Second World War in 1939. The Art Deco style is now widely recognised in the Australian community as making a significant contribution to architectural expression in the 1920s and 1930s. (Criterion E.1)

The layout, planning and design of the pre-war buildings of the Artillery Barracks are important for their creative and design achievement. This is illustrated by the formality of the Parade Ground, in conjunction with the restrained use of Georgian Revival and Art-Deco forms, which echo nineteenth century precedent established at Victoria Barracks in 1842. The scale and formality of the Parade Ground is emphasised by the surrounding, predominantly one and two storey buildings in a bush setting. (Criterion F.1)

The Artillery Barracks is important to the many Defence personnel who were trained or stationed at the complex in its sixty years of operation for Defence purposes, and to military historians in particular the Royal Australian Artillery Historical Society. (Criterion G.1)

Official Values:

Criterion: A Processes

The North Head Artillery Barracks erected from 1935, also known as the School of Artillery, are individually significant within the area of North Head. The site is associated with three phases in the occupation of North Head: the Quarantine Station 1833-1930; for public recreation 1930-1934; and for defence purposes from 1934 to 1998. The stone walls defining sections of the boundary are associated

with recreational use of North Head from 1929. North Fort is closely associated with the development of the Barracks from 1935.

The Artillery Barracks are important in illustrating the implementation of Defence policy in the inter-war years before the onset of the Second World War in 1939. The functional zoning and planning illustrate the continuity of Defence's cultural and social organisation reflected in Commonwealth defence complexes such as the Royal Australian Naval College, 1913-1915, at Jervis Bay. The use of a fashionable architectural style and permanent construction illustrate the influence of the prevailing Art-Deco style on Commonwealth architects and the Commonwealth's intention to provide modern, permanent buildings in the defence of Australia. This pattern is seen in other major defence projects of the late 1930s and early 1940s. The permanent nature of the complex and the quality of its planning and architectural design confirm its importance as the Headquarters of Coastal Defence until 1940, and as a barracks of the modern era in the context of urban Sydney. The design and planning clearly continue the Colonial barracks concept established at Victoria Barracks in 1842, and which in turn reflected British design precedent.

The Artillery Barracks is important for its association with the Coastal Defence of NSW from 1939 to 1945 as part of the Sydney Fire Command and for its use as the School of Artillery between 1946 and 1998.

Attributes

The inter-war period functional zoning and planning, permanent construction and Art-Deco style.

Criterion: B Rarity

The Artillery Barracks are important as a rare example of a permanent military Barracks establishment of the immediate pre-Second World War period.

Attributes

Unified planning, evident in the fabric of the whole place including buildings, terraces, parade grounds, landscaping and symmetrical layout.

Criterion: D Characteristic values

The planning and formal nature of the Artillery Barracks, and the use of Art Deco and Georgian Revival forms, are important in illustrating the principal characteristics of Defence culture and social structure during the Inter-War years in addition to the prevailing use of contemporary architectural style and idiom by Commonwealth architects.

Attributes

The planning and formal nature of the Artillery Barracks, and the use of Art Deco and Georgian Revival forms.

Criterion: E Aesthetic characteristics

The Artillery Barracks are important in illustrating the restrained, relatively rare use of the Inter-War Art-Deco style in the years leading up to the Second World War in 1939. The Art Deco style is now widely recognised in the Australian community as making a significant contribution to architectural expression in the 1920s and 1930s.

Attributes

All fabric and design that demonstrates Art Deco styling.

Criterion: G Social value

The Artillery Barracks is important to the many Defence personnel who were trained or stationed at the complex in its sixty years of operation for Defence purposes, and to military historians in particular the Royal Australian Artillery Historical Society.

Attributes

The relatively unaltered nature of the Barracks.

Description:

HISTORY

The area of North Head was first set aside for quarantine purposes in the 1820s, but in 1837 the whole of the headland was designated for quarantine purposes following a series of cholera outbreaks. North

Head remained dedicated to this use until 1859 when part of the area was set aside for use by the Catholic Church. The transfer was not completed until 1879 with a Seminary and Bishop's Palace established during the 1880s. (Refer to North Head 1/13/24/19 for additional historical details)

Although other prominent headlands defending the approaches to Sydney had been fortified against the likelihood of attack, North Head remained dedicated to its quarantine role. North Head was acquired by the Commonwealth following Federation in 1901, although the Commonwealth did not assume full responsibility for the Quarantine Station until 1910 under the Quarantine Act. Discussions between the State and Commonwealth governments were not resolved for several years.

Until 1901 Defence had been the responsibility of each State. At Port Jackson, and in other capital cities and their associated harbours, attacks had been seen as coming from the sea. During the Napoleonic Wars, in Europe, a battery was constructed 1801-1803 to defend the channel between Middle Head and the southern side of Port Jackson. In 1830 Governor Burke reserved six sites in Sydney Harbour for defence works including North Head. However, the first comprehensive plan for the defence of Sydney Harbour was made by Lt Colonel J Gordon in 1845. This report recognised the defence potential of the Sydney Heads, including North Head. The Gordon Scheme was implemented in 1847 setting in motion a two line defence system with the inner line at Sydney Cove. The Crimean War of 1853-56 accelerated the selection of sites but work was slow. These works ceased in 1855 with the arrival of Sir William Denison who stressed the importance of an inner line of defences.

The loss of Imperial Troops by 1870 reinforced the need to establish new defences following the 1862 decision by the British Government to put the responsibility for defence onto the Australian colonies. A new line of Defences were established in Sydney Harbour from 1871 on Middle Head, Georges Heights, South Head and Bradleys Head in addition to other strategic sites within the harbour. The dedicated quarantine role of North Head and its isolation from Sydney appear to have reduced the headland's potentially strategic defence role.

In 1929 the Commonwealth Government granted permissive occupancy over 300 acres of North Head for public use to Manly Council following increasing demand for recreational uses. This was conditional on Manly Council building a stone wall to isolate the Quarantine Station. Parkhill Reserve, comprising the whole of the headland outside the Quarantine Station, was opened in 1933 as a public reserve. A cobblestone Avenue of Honour was opened on the eastern side of the Barracks Precinct. This road was intended to provide a circuit of the eastern portion of the headland. Norfolk Island Pines on the headland may be a remnant of a planting program undertaken by Manly Council at this time, as a memorial to soldiers from Manly Warringah killed during World War 1.

During the Inter War Years, in response to the perceived onset of the Second World War, there was a sharp increase in construction from 1935 to 1939. In 1934 the Commonwealth had withdrawn permissive occupancy in anticipation of the fortification of the headland for coastal defence, completing Lt Colonel J Gordon's 1845 plan for a line of outer defences to Port Jackson. Locating coastal defences on North Head optimised the range and strategic importance of the site with respect to the vulnerable suburbs of Sydney.

In 1934 the Minister for Defence announced a 3 year program of coastal defence works. At the same time the first two 9.2 inch guns were purchased for installation at North Head in the North Fort complex. These two guns were to be supported by six inch batteries at South Head. An Artillery Barracks complex was completed by 1938 and was used as the Headquarters of the Australian Coast Brigade with barracks for personnel manning the coastal fortifications at North Fort and Bluefish Point erected 1935-1936. Completion of the North Fort gun emplacements before the Barracks is indicative of the importance of the guns to the Sydney Fire Command as the single most important component of Sydney's defence. Following completion of defence works some areas of the headland in the Parkhill Reserve were returned for recreational use in 1936. North Head was to play a central role in the defence of Sydney harbour, a role determined after an assessment of the Japanese threat and Japan's naval capacity. The first Australian land-based radar station was established at Blue Fish Point in 1941, during the Second World War.

The main barracks complex, the North Fort Barracks Group, was erected between 1936 and 1937, below the North Head central ridge of high ground and the trajectory of seaward guns. Arranged around a red gravel parade ground the complex was the largest barracks complex erected in Australia in the pre-war years. Tenders for construction included the following buildings and structures: Administration, Battery Offices, Trades, Mens Barracks, Sergeant's Mess, Gymnasium, Garage and Workshop, Hospital, Officers Mess, Battery Commanders Residence, Football and Hockey Fields, Parade Ground, Tennis Courts, Shelter Sheds and Store Rooms at the ovals and Tennis Court Shelter Sheds. The two large cottages for the Battery Commanders were erected in what is now St Barbara's Avenue. Four cottages for NCOs were also constructed at this time; these are the southernmost cottages within the Artillery Barracks Precinct facing North Head Scenic Drive. The grounds of the barracks were

landscaped with lawns, rockeries and flower beds. A new road led from the Barracks through the North Fort gate to the gun emplacements of North Head Fort. A second barracks complex was constructed within the Quarantine Reserve. This barracks complex included the cottages that now serve as gatehouses at the entry to the Quarantine Station. The Quarantine Station defence works also included a new pump house and supply line to a tank in the Barracks compound.

The 1st Heavy Brigade moved into its headquarters in 1938, the 2nd Heavy Battery taking over responsibility for the 9.3 inch guns. Before 1940 the entire Sydney Defence was commanded from the North Head Barracks. Subsequently this was transferred to the Commanding Officer of the 5th Brigade at Dover Heights. By 1943 some 190 personnel were stationed at the Fort including many women from the Australian Women's Army Service. A third barracks complex of temporary huts was also erected on the Bluefish Road east of the Parkhill Gate. By mid 1943 the threat of attack had diminished and by 1945 a reduction in defensive personnel had begun with the coastal defences placed in a state of care and maintenance.

In the post war period coastal fortifications were in general decommissioned. In 1945 the Barracks were occupied by the Land Headquarters School of Artillery [Coast] and in 1946 the School was concentrated at North Head. The Coast Wing of the School was disbanded in 1950 but the 1st Field Regiment had been formed in 1949 and acted as a depot unit for the school. New buildings were erected to accommodate the school and by 1950 a number of buildings including the Q store had been built. In 1953 the Coastal Artillery Brigade Headquarters within the barracks Group complex became the School of Artillery. The School was a crucial aspect of the basic individual training of officers, NCOs and gunners into the 1970s and 1980s. Since the 1950s the Barracks have been used for many high level military conferences in addition to their training roles.

In 1968 new planning initiatives were implemented for North Fort and the Artillery Barracks. These included the Officers Mess Annexe, Radar Store complex and technical store. Most of the proposed changes however, were not implemented due to the limitations of the site area, with few permanent buildings erected after 1968. The wide use of demountable buildings does however, illustrate the continued growth of the School of Artillery. In 1979 the Commonwealth and State entered into the Foreshores Agreement. Under the agreement Defence would relinquish its land at North Head when it eventually became surplus to Defence requirements. In December 1989 the artillery directorate was relocated from Canberra to the School of Artillery at North Head. In early 1998 the School of Artillery was relocated to Puckapunyal.

In 1984 the North Head Quarantine Station was acquired by the NSW NPWS. Other land acquired by NSW National Parks and Wildlife Service included the North Head Sydney Harbour National Park Reserve in 1979.

The associated North Fort was established in 1990 as a military museum with other elements of the defence works included in Sydney Harbour National Park, established in 1984, on the eastern side of the Artillery Barracks Precinct and North Head.

PHYSICAL DESCRIPTION

North Head Artillery Barracks is individually significant within the area of North Head (Refer to file no. 1/13/24/19). The adjacent and associated RNE place, North Fort, file no. 1/13/24/5, adjoins the Artillery Barracks complex on its eastern boundary.

The area of the Artillery Barracks complex, also known as the School of Artillery, is also defined by the stone wall erected by Manly Council in the 1930s at its eastern side and Blue Fish Road and North Head Scenic Drive on the western and northeastern boundaries.

North Fort Road is the main access road and internal generator, providing access and linking all elements of the Artillery Barracks and North Fort fortifications. Elements of North Fort are located in the area including the site of the former barracks associated with the construction of North Fort.

The main elements of the Artillery School are located between North Fort Road and the eastern boundary of the site defined in part by the stone boundary wall and Blue Fish Road. The topography and existing uses of the headland dictated site areas to be used for North Fort and the associated barracks complexes, ovals and training areas. During the early phases of construction areas were levelled, contoured and turfed to provide for sports such as cricket, football and hockey. In keeping with the formal planning of earlier established Commonwealth places, such as the Royal Australian Naval College at Jervis Bay 1913-1915, the core areas of the Artillery Barracks incorporated open spaces and training ovals into the axial planning, building on the planning and design of Colonial Barracks such as Victoria Barracks in Sydney erected from 1842. Functional zoning and planning were an expression of the prevailing cultural and social organisation of Defence forces. Other contemporary examples include

RAAF Base Fairbairn in the ACT and at a smaller scale the Signal Depot at Albert Park in Melbourne which also illustrate the influence of the Inter-War Art-Deco style on the Commonwealth Architects Department.

The complex is approached from North Fort Road, the main point of access, with the major axis of the Artillery Barracks at right angles to the approach. The red gravelled Parade Ground is the primary focus of the complex and is flanked by the two storey Officer's Mess, single storey Sergeants Mess, Gatehouse, and Other ranks Mess and Living in Accommodation. Other buildings associated with this first phase of development, 1936-1939, include the Battery Offices, the Trades Building, the Gymnasium, the Garage and Workshop, the Hospital and the Battery Commanders Residence. This group of one and two storey buildings expresses the prevailing Defence culture and is an excellent example of a defence complex of the Inter-War pre-World War Two period when permanent bases were established in the lead up to the Second World War.

The architectural character stems from the use of:

- pale cream to buff, brick load-bearing construction with reinforced concrete floors.
- simple rectangular forms, reflecting the Inter-War Georgian Revival style, with tiled, timber framed hipped roofs (often parapeted), subordinate to the overall Inter-War Art Deco design. The principal characteristics of Art Deco are illustrated by the horizontality of the buildings and their components, contrasting vertical elements, straight lines and low relief decoration in the fairface brickwork.

Precedent for the design of the Guardhouse and Other Ranks Mess and Living in Accommodation flanking the Parade Ground can be seen in Victoria Barracks, Sydney, erected after 1842, in which a central entrance is flanked by lower two storey wings. The permanent nature of the Artillery Barracks complex reflects its location in the State capital.

A good example of the architectural forms is the Gatehouse (building A6), the formal entrance to the Parade Ground, which features simple, contrasting string courses defining parapets, openings and floor levels. The central two storey tower contrasts with the single storey wings which feature classical details in the projecting end bays and characteristically three rows of string courses accentuating the roof line below the hipped roofs which are subordinate to the overall composition. Windows are in general sash with the upper and lower sashes in three horizontal panes reflecting the lines of the red brick string coursing defining the upper and lower edges of external brick walls. Later, wartime, core buildings, such as the 'New Hospital' of 1942, were erected using the early design idiom.

The dramatic scale, formality and importance of the Parade Ground are emphasised by the surrounding one and two storey buildings which enclose and isolate the space in a bushland setting.

The symmetry of the planning is reflected to some extent in the location of trees and shrubs within the base. A short row (x3) of Norfolk Island Pines defines the entrance to the Guardhouse.

Subsequent development of the base in the 1950s and more recently has been ad hoc, recognising the nature of the site and its limitations. However buildings related to mess and accommodation have in general been in brick reflecting the dominant design characteristics of the Barracks.

1. The pre war and wartime operation of the complex is illustrated by the following:

- Other Ranks Mess and Living-in Accommodation 1936
- Trades Building (now EDR/FACE rooms) 1936
- Officers Mess and Garage 1936/37
- Parade Ground 1937
- Sergeants Mess 1937
- Administration Building (now the Gatehouse) 1937
- Transport Office (now RAEME HQ and Store) 1937
- Gymnasium 1937/38
- Battery Offices (now Company Brigade Office) 1939
- Transport Office 1941
- Workshop and Store(now GE Store) 1941
- Hospital now Dental and Printing rooms 1942
- Artillery Store (now QM Storage and RAEME repair) 1939
- Ancillary structures and sites 1936-1945:
- Tennis Courts and shelter 1937
- Oval 1937
- Football field shelter 1937
- Memorial [cobblestone] Drive c.1933

2. Post War operation as the School of Artillery is illustrated by the following:

- Model Room 1947 (part of the Regional Training Wing)
- Open Gun Park 1952
- ARMCO Missile Launching System Storage (relocated Nissen Hut) 1956
- Officers Mess Annexe 1955-61
- RAEME Repair & Parts 1956-62

3. Other sites include:

- the foundation remains of the Barracks Camp erected by 1943 close to North Fort to provide accommodation for the people who installed, tested and managed the operation of the guns.
- a range of supporting and ancillary structures.

History: Not Available

Condition and Integrity:

INTEGRITY

The North Fort Barracks Group was adapted as the School of Artillery after the Second World War. In this role it has been adapted to the changing needs of Defence's training strategy. The original layout and primary structures of the Artillery Barracks remains intact with post war developments, including demountables and prefabricated structures, in general peripheral to the core areas of the facility. (December 2000)

CONDITION

Structures identified in the description of physical fabric as significant have in general maintained in good condition by Defence. (December 2000)

Location:

About 50ha, off North Head Scenic Drive, Manly, being an area enclosed by a line commencing at the intersection of the Commonwealth property boundary and fortification wall at approximate AMG point 342120mE 6256520mN, then northerly via the fortification wall to its intersection with AMG northing 6256720mN, then directly to Cowell Trig, then directly to the intersection of the fortification wall with AMG northing 6256940mN, then northerly via the fortification wall to its intersection with the Commonwealth property boundary at approximate AMG point 342600mE 6257400mN, then north westerly, southerly and easterly via the Commonwealth property boundary to the point of commencement.

Bibliography:

Schwager Brooks and Partners, Sydney Fortress Sites at North Head: Survey and Recommendations 1996

Freeman, P Pty Ltd and P McLaren, North Head Defence Assessment, Heritage Assessment Volume 1 of 2: Heritage Assessment, for the Department of Defence, Sydney 2000