

Conservation Master Plan  
Millennium Parklands Heritage Precinct



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**PART A**

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**Introduction**



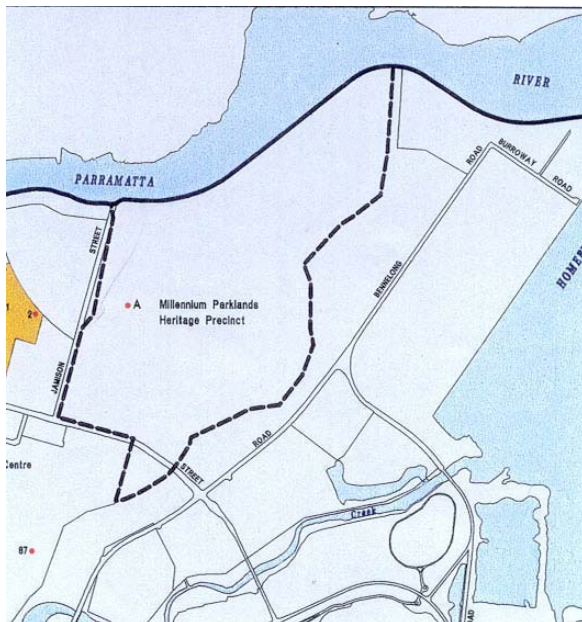
## 1.0 Introduction

### 1.1 Context of the Conservation Master Plan

This Conservation Master Plan (CMP) was commissioned by the Sydney Olympic Park Authority (SOPA) as a means of managing the overall conservation and development of the northern section of the former Royal Australian Navy Armament Depot (RANAD), at Newington.

The site of the Armament Depot was originally an area of natural woodland and wetland, used by Aboriginal people. Following European settlement, it was the site of early land grants from 1797, and was used for grazing and industry during the 19th century.

The Armament Depot operated at Newington from 1897 until 1999, when the Depot was closed and the operations were moved elsewhere by the Commonwealth Government. Ownership of the entire site was transferred to the NSW Government and brought under the management authority of the Olympic Co-ordination Authority, and subsequently, the Sydney Olympic Park Authority. The site was identified as the Millennium Parklands Heritage Precinct (MPHP) with the gazettal of Sydney Regional Environmental Plan No. 24 – Homebush Bay Area, (Amendment No. 2) in 2002 and is now part of the Sydney Olympic Parklands (see **Figure 1.1**). The woodland and wetland areas of the MPHP are within the Newington Nature Reserve gazetted under the *National Parks and Wildlife Act, 1974*.



**Figure 1.1** –Extract from Sydney Regional Environmental Plan No. 24 – Homebush Bay Area (Amendment No.2), Map 3 – Heritage and Conservation Areas identifying MPHP.

The subject site represents the northern section of the former Armament Depot, the southern section of which was removed and redeveloped for the Sydney Olympic Village (now the suburb of Newington), Narrawang Wetland, Haslams Creek Flats and Woo-La-Ra. As part of the construction of the Olympic facilities, the alignment of Holker Street was extended to the east to provide a major access route into the Olympic precinct. Holker Street now effectively forms the southern boundary of the MPHP site (see **Figures 1.4** and **1.5**). It should be noted that the site, the subject of this CMP, does not include that part of the Wharf owned by the Waterways Authority. The Authority does not have any lease/agreement over this part of the wharf for care, control or management. As such this CMP does not relate to that part of the Wharf owned by the Waterways Authority.

The MPHP has been nominated by the Sydney Olympic Park Authority for inclusion in the NSW State Heritage Register. Registration has been nominated on the basis that the entire site should be covered by the one comprehensive listing, not as a collection of individual listings of differing characteristics or components. This comprehensive approach was adopted in recognition of the place as an integrated cultural landscape having both natural and cultural features and a multitude of historic layers.

This CMP accompanies the anticipated State Heritage Registration of the site. The CMP provides an integrated document that facilitates the processes of conservation, reuse and on-going maintenance. A separate report examining Aboriginal heritage is to be prepared by Sydney Olympic Park Authority, including management policies and Aboriginal consultation strategies to appropriately manage the Aboriginal cultural heritage of the area. As a result, this CMP does not cover Aboriginal heritage in great detail, but includes brief statements of significance, as it was understood in 2003. An historic archaeological survey was not commissioned for this report.

The previous Conservation Management Plan, prepared by Brian McDonald and Associates for the Department of Defence in 1997, was produced prior to the redevelopment of the southern part of the site for the Olympic Village and subsequently the suburb of Newington and the change of ownership. It was therefore considered necessary to update the work with a new Plan, which took into account the development of the site as part of Sydney Olympic Park.

The MPHP is now part of the Parklands at Sydney Olympic Park, which will incorporate a number of new developments as well as open spaces, public parks and sporting facilities. The MPHP also incorporates the Newington Nature Reserve, which was formerly part of RANAD. The Newington Nature Reserve is managed by Sydney Olympic Park Authority, in accordance with a Plan of Management, under a Memorandum of Understanding from NSW National Parks and Wildlife Service (NPWS).

The primary direction proposed for the MPHP is as a centre for education, ecological and cultural research which will encourage the progressive opening of the place for well managed artistic expression, cultural, environmental and recreational tourism. This CMP has been written with the proposal in mind and the future use of the site as part of the Parklands generally as set out in Parklands 2020 and the Parklands Plan of Management. This CMP sets out the heritage values and constraints cognisant of those broad uses.

## 1.2 Role of Parklands Plan of Management

The Parklands at Sydney Olympic Park (which includes the MPHP) are subject to a statutory Plan of Management. The Plan of Management is required and authorised by the *Sydney Olympic Park Authority Act 2001*, and was adopted by the Minister for State Development and endorsed by the NSW Minister for the Environment in January 2003. The Plan of Management incorporates the Plan of Management for the Newington Nature Reserve as authorised in the *Sydney Olympic Park Act, 2001*.

The Parklands are comprised of seventeen Management Precincts of which three (Newington Armory, Wanngal Wetland, and Wanngal Woodland) and a minor portion of one (Blaxland Common) together make up the MPHP, the subject of this CMP. Newington Nature Reserve comprises the Management Precincts Wanngal Wetland and Wanngal Woodland (see **Figure 1.2**).



**Figure 1.2** - Extract from Parklands Plan of Management, Appendix 2, Plan 2: Management Precinct Locations identifying the Precincts, which comprise MPHP

The Plan of Management is the predominant statutory instrument controlling the use and management of the Parklands, in that the *Sydney Olympic Park Act, 2001* requires all uses and activities in the Parklands to be consistent with the provisions of the PoM, and not otherwise. The Plan recognises that in addition to the PoM there are various other statutory obligations applicable to the Parklands. Where these obligations are not in conflict or inconsistent with the PoM they must be complied with in addition to the requirements of the Plan, not instead of the requirements of the Plan. Where these obligations are in conflict with the PoM they are for the purposes of managing the Parklands invalid to the extent of the conflict or inconsistency and the provisions of the PoM take precedence.

The Plan of Management requires the nomination of the MPHP for listing on the State Heritage Register, and acknowledges that the relevance of this CMP and that the Authority will most likely be required to seek approval from the NSW Heritage Council for any development proposals that are not subject to an exemption as set out in this CMP or any other future Conservation Plans.

To avoid inconsistencies, all of the details relating to the natural values of this MPHP have not been included in this CMP as they are comprehensively identified in the Parklands Plan of Management. In this regard references are made throughout this document to the natural values of the Precinct as set out in the Parklands Plan of Management.

### **1.3 Role of the Conservation Master Plan**

One of the primary objectives of this CMP is to provide a clear philosophy and direction for the conservation, re-use, interpretation and management of the MPHP.

In addition (as negotiated with the NSW Heritage Office) this CMP is an integrated document; it is also considered to be part of the Authority's Heritage and Conservation Register as required under Section 170 of the *Heritage Act, 1977*.

With the anticipated inclusion of the site on the NSW State Heritage Register, this CMP will also provide the basis for liaison and exemptions agreements between Sydney Olympic Park Authority, and the NSW Heritage Council, and with the NPWS for the Nature Reserve, and with the Department of Infrastructure, Planning and Natural Resources for some aspects of statutory planning.

Once registered as an item of state significance, all works to the MPHP, (beyond those that are specifically listed in the exemptions under the registration or the *Heritage Act, 1977* generally) require prior approval from the NSW Heritage Council. Over recent years the NSW Heritage Office has encouraged the owners and managers of large heritage sites, including those in the public sector, to prepare Conservation Management Plans for their sites. These conservation policies developed then guide the on-going heritage management of the place and establish a framework for specific actions, such as further development, adaptation, modification and alterations.

Given the complexity of the MPHP, it has been agreed with the NSW Heritage Office that the initial document should take the form of a Conservation Master Plan. It establishes the nature and significance of the place as a unified entity and formulates policies for its conservation,

management and future development and use. Once endorsed by the NSW Heritage Council, any works, development or management activities identified in this CMP as exempt can be undertaken without further reference to the NSW Heritage Council (see **section 22.9**).

This CMP also establishes a list of elements for which more detailed conservation documentation will be required.

## 1.4 Methodology and Structure

The key methodology of this CMP has been to present an integrated approach to the natural and cultural values of the site, and the management of those values in a way that respects all of the values of significance. The foundations of the CMP policies and methodology are the *Australian Natural Heritage Charter 2002* (for natural heritage), the *Australia ICOMOS Burra Charter 1999*, Dr. J.S. Kerr's *The Conservation Plan* and the *NSW Heritage Manual* guidelines for preparing a conservation plan for the cultural heritage.

A review of previous material demonstrated a wealth of information on the natural and cultural history of the Armament Depot, and so new research was limited to more contextual and broader aspects of the site history and environment. Significance assessments were reviewed and re-written to reflect this more integrated and inclusive approach to the significance of the site. The identification of opportunities and constraints, which arise in part from the significance of the site, are identified. They then inform the conservation policies and implementation guidelines.

The subject site contains a wealth of natural and cultural landscapes, many different types of buildings and industrial infrastructure related to its historic use as an explosives storage depot, as well as other cultural features. The significance of the place is as a total, integrated military industrial complex, set across an extensive and evolved riverside landscape. To the casual observer, many of the buildings and other structures on the site may appear to be of little value, erected using light weight materials, of doubtful architectural merit or of relatively recent construction. When compared with the apparently finer buildings of the late 19th or early 20th centuries that defined the early establishment. The important factor that has been taken into consideration in this CMP, however, is that every building and structure on the depot contributed to its overall functional role and historic evolution. For that reason the CMP has deliberately avoided the classification of buildings or elements as having different levels of heritage significance. On such a large and complex site such a classification may lead to a focus of management resources onto those buildings of higher significance, at the expense of protecting and managing the integrated significance of the entire place.

The need for adaptation and re-use of the historic features of the site has been recognised and investigated with reference to the conservation policies. The formulation of an interpretation plan and visitor management policies is recognised as vital to conservation planning of a site destined for cultural tourism and relevant policies have been written with reference to the *ICOMOS International Cultural Tourism Charter*.

The major parts of the CMP comprise:  
Part A

Introduction

Part B  
Understanding the Resource

Part C  
Significance of the Resource

Part D  
Opportunities and Constraints

Part E  
Conservation Policies

Part F  
Implementing the Plan

## **1.5 Terminology**

The Olympic Co-ordination Authority (OCA) was replaced by the Sydney Olympic Park Authority (the Authority). The current manager of the overall Precinct is the Sydney Olympic Park Authority.

Throughout this document, when referring to the site prior to the Authority's ownership, the acronym RANAD, or the abbreviation Armament Depot, has been used for the former Royal Australian Navy Armament Depot. In referring to the site at the present time, the name Millennium Parklands Heritage Precinct is used.

The Parklands Plan of Management identifies the MPHP as comprising three management precincts (Newington Armory, Wanngal Wetland, and Wanngal Woodland) and a minor portion of one (Blaxland Common).

Under the Plan of Management the Newington Nature Reserve is identified as the Management Precincts Wanngal Wetland and Wanngal Woodland. [It should be noted that the name "Wanngal" is only a proposed name for the wetland and woodland sections of the Newington Nature Reserve and it is yet to be approved by the NPWS]

## **1.6 Site Identification**

MPHP is located in Sydney Olympic Park (see **Figure 1.3**). It is generally bounded by the Parramatta River to the north, Holker Street to the south, Jamieson Street to the west and the recently formed Louise Sauvage Pathway to the east. A triangular shaped parcel of land containing Building 47 lies to the south of Holker Street and also forms part of the MPHP. The MPHP contains an extensive area of wetland, which fronts the river, grasslands and elevated areas of woodland. The current site contains nearly 100 buildings and structures including a wharf and light rail system. It should be noted that part of the Wharf is owned by Waterways Authority and does not form part of the site affected by this CMP.



The site has been reduced by more than half since previous studies and reports were conducted in 1996-1997, with the creation of new roads, fences, the suburb of Newington (on the southern section beyond Holker Street) and Narrawang Wetland, Haslams Creek Flats and Woo-La-Ra (see **Figures 1.4, 1.5, 1.6 and 1.7**). Its wider curtilage was significantly altered with the remediation of large parts of the wetland and the construction of leachate ponds, earthworks and mounds in the period leading up to the Sydney 2000 Olympic Games.

In addition to the reduced drawings contained in this document, detailed site plans are available in CADD format and are held in the SOPA Library.



**Figure 1.3** - Location of Millennium Parklands Heritage Precinct  
UBD Street Directory 2002

## 1.7 Authorship

This report was written by Graham Brooks and Sera Jane Peters of Graham Brooks and Associates Pty Ltd, Architects and Heritage Consultants.

At the request of the Authority, Lorraine Cairnes of Fathom Consulting has carefully edited a draft of this report to ensure reasonable consistency with natural heritage management principles. The authors concur with these edits.

At the request of the Authority a consultant team led by Paul Irish commenced a detailed review of the Aboriginal heritage values of the MPHP in 2003. The initial findings of this work have been used by Paul Irish to prepare the text contained **Section 2.3** and **2.4.1**. The findings of this project will ultimately expand the understanding of the Heritage Significance of the resource, which is currently outlined in **Section 5.0**.

One of the key aspects of this editing process was the adoption of the heritage timeline convention: natural – Indigenous - historic heritage. The order does not imply a primacy of one value over others.

## 1.8 Previous Reports and Sources

Existing documentary material, which was reviewed for this report, includes the following reports and other sources cited in endnotes.

- *Conservation Management Plan, RAN Newington Armament Depot*, Olympic Coordination Authority, February 1997, Brian McDonald and Associates.
- *Heritage Assessment, RAN Armament Depot Newington*, Department of Defence, May 1996, Schwager Brooks and Partners.
- *Heritage Inventory (2 Volumes), Newington Armament Depot*, Department of Defence, April 1996, Schwager Brooks and Partners. (Copy held in SOPA Library)
- *Summary Report and Review of Heritage Studies relating to the Homebush Bay Area*, Volume 1, Department of Planning, September 1993, A. and H. Bonanno Consultants.
- *Homebush Bay Conservation Study*, Department of Environment and Planning, April 1986, Fox and Associates.

The historical section has drawn heavily on the work of Wendy Thorp who wrote the history of the RANAD site for the 1996 Heritage Assessment by Schwager Brooks and Partners (SBP). The chronological history and the associated plans from that history showing the progressive growth of the RANAD site throughout its operational life, are contained in Part G, Supporting Information of this document.

The 1996 SBP *Heritage Assessment of RANAD* defined a number of precincts that related to major periods in the development of the site as an Armament Depot. These precincts principally related to historical periods of development but also reflected the changing



processes of explosives storage and handling and the integration of these developments into different landscape elements. The 1996 precinct names have been retained for this report in the interests of consistency. As necessary their boundaries have been adjusted to reflect the development of areas to the south of the current site for Parklands and the suburb of Newington.

The precincts are:

1. Original Establishment Precinct;
2. Early Naval Occupancy Precinct;
3. RAN Wartime Expansion Precinct; and
4. US Navy Utilisation Precinct.

The original area of the MPHP has been reduced in the size in order to develop the suburb of Newington, Narrawang Wetland, Haslams Creek Flats and Woo-La-Ra. The fifth and final precinct, identified by SBP, *Major Wartime Expansion Precinct* was situated entirely within this excised area and so this precinct has been dropped from the current CMP. Precincts 3 and 4 are smaller Precincts than that originally identified by SBP.

The natural heritage values of the site are logically mapped as three zones that do not coincide with the historic precincts. These are:

1. the woodland;
2. the saltwater wetland; and
3. the open grassland.

The two volume Heritage Inventory which SBP produced in 1996 for the Department of Defence, has been the source of all details on building use, function and date. The information contained within it has changed in some respects, notably in condition assessments and the greatly reduced number of items.

The basic plan of the site, which has been used extensively, was drawn by the Authority's CADD Unit.

## **1.9 Acknowledgments**

The authors would like to thank all of those who assisted in the preparation of this report, including:

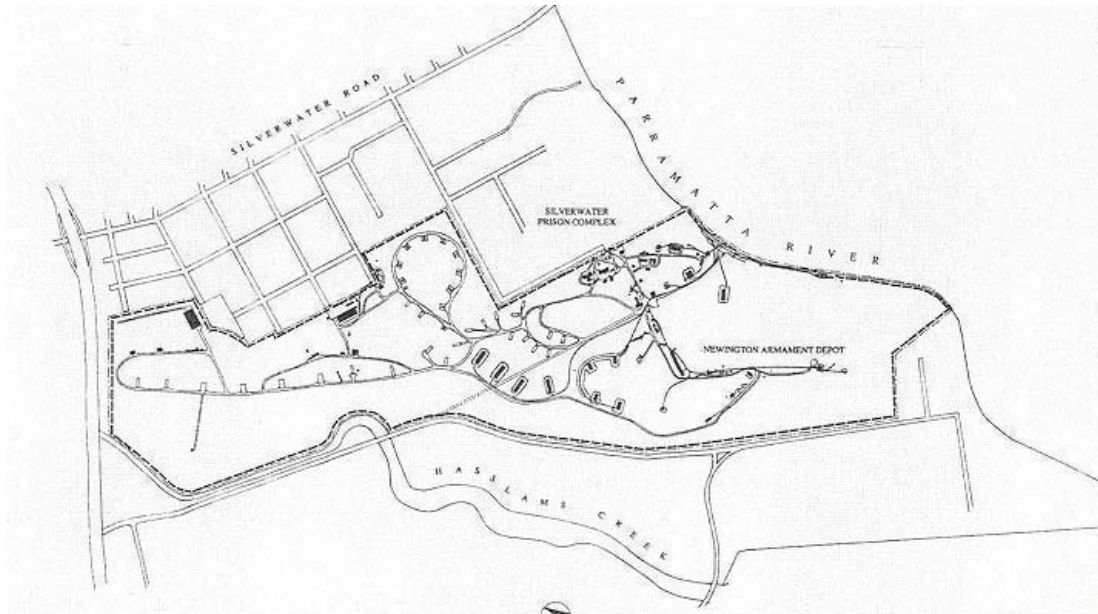
Ann Pugh, Helen Mulcahy, Dianne Leeson, David Grant, Leon Paroissien, John Kent, David Saunders, Rachel Short, Michelle Mason and Terry Milham.

## **1.10 Photographic Illustrations**

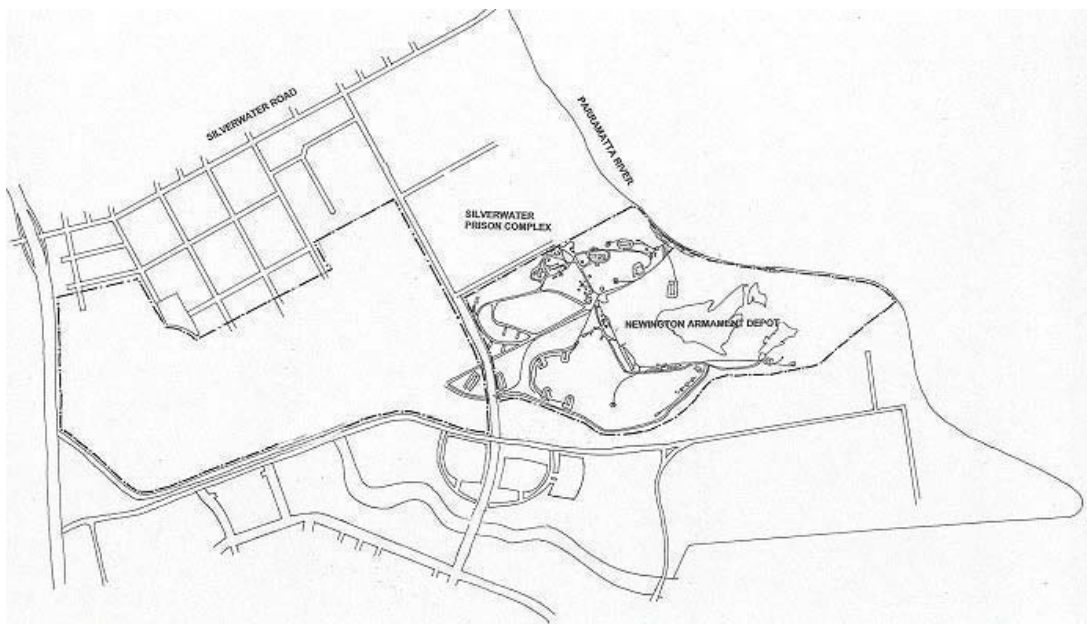
The majority of photographs contained within this document were taken prior to the building and infrastructure maintenance works that extended across the site in 2001-2002.

A number of the photos have been re-used from the 1996 SBP Heritage Assessment.

Historic photos were drawn from documentary archives held on the site.



**Figure 1.4.** Royal Australian Navy Armament Depot Site Plan, 1996, Schwager Brooks and Partners, 1996



**Figure 1.5.** MPHP Site Plan, 2003



**Figure 1.6.** Aerial view from the west prior to Sydney 2000 Olympic and Paralympic Games and related works, 1996 Schwager Brooks and Partners



**Figure 1.7** Aerial Photo from the north, prior to Sydney 2000 Olympic and Paralympic Games related works, 1996 Schwager Brooks and Partners

**PART B**

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**Understanding the  
Resource**

## 2.0 Thematic History

### 2.1 Introduction

This history forms part of the heritage assessment section of the CMP of the MPHP. The history has drawn on the information contained in the 1996 *Heritage Assessment of RANAD* by SBP, as well as various other sources, relating to Aboriginal, pastoral and defence occupation.

In order to comply with the Australian Heritage Commission and NSW Heritage Office protocols regarding historical research, this history has been written thematically. A thematic approach can provide contextual patterns and associations, in relation to human activities in the environment, which would not be immediately obvious from a strictly descriptive or chronological approach. A thematic history provides the opportunity for investigating the social and lifestyle aspects of cultural landscapes as well as the historic fabric, and the interaction between the two in the historical record.

The Australian Heritage Commission (AHC) has developed a thematic framework for use in heritage assessment and management. The Australian Historic Themes Framework identifies nine principal thematic groups and numerous sub-themes. The organising principle for the thematic framework is human activity; “By emphasising the human activities that produced the places we value, and the human response to Australia’s natural environment, places are related to the processes and stories associated with them, rather than to the type or function of place.”(AHC, 2000) The AHC themes were designed to be used in conjunction with regional or State themes. The 35 State Historical themes were formulated by the NSW Heritage Office, and are designed to be specifically relevant to the history of NSW.

While these historical thematic systems work well for cultural heritage, they are not fully successful for natural heritage because they are based on human activity. However, the thematic approach is used here as far as possible to meet the expectations of the NSW Heritage Council and to allow integrated consideration of the natural and cultural heritage values.

The themes which have been chosen for the history of MPHP represent the most significant cultural aspects of the site; the history of Aboriginal occupation and then dispossession by Europeans; European pastoral settlement and its subsequent effect on the environment; Defence occupation of the site; environmental change and the subsequent remediation works; and the role of the Armament Depot in the wider network of defence establishments in Sydney.

The Australian Historic Themes, which best reflect the history of the site, are:

- 2.5 Promoting Settlement
- 3.11 Altering the Environment
- 7.7 Defending Australia

The State Historical Themes, which best reflect the history of the site, are:

1. First Australians
9. Environment
23. Defence

These themes have formed the basis of questions about the history and interpretation of the site. The chapters, which follow, incorporate consideration of natural values and reflect the historic themes, while the chronological history, which deals with the non-Aboriginal settlement and defence occupation of the site only, has been taken from the 1996 *Heritage Assessment of RANAD* by SBP.

## 2.2 Natural History

The history of the Sydney region's landforms and biodiversity is a result of hundreds of millions of years of change and evolution.

In the Permian period 286 to 248 million years ago, the Sydney region was a broad swampy river basin covered with lush plant life. During the early Triassic period 230 million years ago sand, silt and clay sediments filled the Sydney basin. The Permian swamps became coal layers. The sand and silts became sandstone, mudstone and shale.

In the Jurassic period 213 to 144 million years ago, the sandstone formations of Sydney Harbour were raised to their present heights. Cycads, ferns and conifers were dominant. The Cretaceous period saw small and medium sized dinosaurs, egg laying mammals, turtles, marine reptiles and invertebrates among the fauna of eastern Australia. The sudden cooling that ended this period led to extinction of the dinosaurs and brought a change to the modern flora and fauna.

During the tertiary period (55 – 2.4 million years ago) the Blue Mountains were lifted by crust pressures and the Cumberland Plain formed. Rivers cut gorges through the sandstone plateau country near the coast.

The climate became drier and cooler. Mammals began to dominate, the megafauna evolved, with fish, frogs, snakes, bats and birds. Then colder and warmer periods alternated in the Quaternary 1.8 million years ago.

By at least 20,000 years ago Aboriginal people were living in the Sydney Basin.

In the Ice Ages of the Pleistocene 20,000 years ago, sea levels were 120 – 140 m below the present level, but during the Holocene 6,000 years ago, the sea level rose to fill Sydney Harbour and its tributaries. The climate was cold, dry and windy, and there were severe bushfires, droughts and floods. This was the time when today's topography of the Parramatta River would have been formed, and the natural biodiversity and ecological processes related to today's environment would have been developed.

### 2.3 Aboriginal Settlement

The long Aboriginal occupation and use of the Sydney area asserted by Aboriginal oral tradition is amply supported by archaeological evidence from the region. A number of Aboriginal sites have been excavated throughout the region from a variety of environments. A rockshelter site in the Blue Mountains (Kings Tableland) has been dated to about 22,000 years ago, implying that the Sydney region has been occupied by Aboriginal people for at least 20,000 years.

During this period the Sydney area had a vastly different environment than today. The coastline lay tens of kilometres further east, the Parramatta River (and Sydney Harbour) was a deep river valley winding its way out to the coast, and the harbour islands were hills within the valley. Starting about 15,000 years ago, the warmer temperatures of the end of the last ice age began to melt the polar ice sheets and raise water levels over the course of several thousand years. During this time many of the oldest Aboriginal sites along the coast and waterways were abandoned and drowned by the rising waters.

Whilst Aboriginal occupation of the Homebush Bay area is likely to date back well into this last ice age (before it even became a bay), there are few scientifically dated sites within the area. At present the oldest (and one of the only) dated sites within the area is the John Curtin Reserve rockshelter on Toongabbie Creek (some 6kms northwest of Homebush Bay), which has an initial occupation date of around 5,600 years ago.

By about 6,000 years ago waters had completely flooded over the old coastal plain and the Sydney environment with which we are now familiar was largely stabilised. The vast majority of sites in the area date to within the last 5,000 years, well after the sea had reached its present level. It is assumed that most of the older sites are now many metres underwater.

The sites which have survived and been recorded demonstrate that Aboriginal people lived in a variety of environments and utilised a wide range of plant and animal resources for food, shelter and equipment. The types of sites known from the region include rockshelter campsites (some with shell middens, stone artefacts and some also with art), open campsites (shell middens and stone artefact scatters), rock engravings and paintings, scarred trees, axe-grinding grooves, burial sites, stone and ochre quarries and a variety of post-contact sites.

Physical evidence of the usage of the Homebush Bay area by Aboriginal people has been found in the form of several stone artefacts located at the site of the Newington Olympic Village (now the suburb of Newington) and within the Newington Nature Reserve. Aboriginal shell middens (campsites where shellfish and other foods were consumed) are also known to have lined Homebush Bay and the Parramatta River but were destroyed by limeburners in the eighteenth and nineteenth centuries (who quarried the middens to burn the lime-rich shell for use as mortar) and subsequent alterations to the shoreline.

Documentary evidence of Aboriginal traditional life in the Homebush Bay area is scant. A majority of early historical observations of Aboriginal people in Sydney are from the Sydney Cove and outer harbour area, and it is currently unclear to what extent the picture of traditional life they paint can be transposed to the Parramatta River area. It is likely that Aboriginal people in the area exploited a wide range of fish, shellfish, land animal, bird and plant foods. The availability of many species of plant and animal has been documented for



the area in a survey of the bush foods of Homebush Bay (Lee & Lennis 2000). The known existence of shell middens in the area is also evidence for the exploitation of the shellfish resources of the mudflats (likely to include rock oyster, mud oyster, cockles and mud-whelks).

## **2.4 Dispossession and Settlement**

### **2.4.1 Dispossession**

The Aboriginal people of southeast New South Wales lived in relatively small groups called bands, made up of several extended families (a clan) and the intermarried women of other clans. There were twenty to thirty (or more) clans in the Sydney region, each speaking one or more of several languages used in the region. It is possible that these language groups (each comprising several clan groups) had a larger language based identity, though it is also possible that identity was expressed in other ways. At any rate, clans were the land-owning social groups in the Sydney region.

When Europeans arrived in 1788, the Homebush Bay area formed part of the traditional lands of the Wanngal (or Wanegal) clan. The lands of the Wanngal clan extended along the southern shore of the Parramatta River between about Leichhardt and Auburn. The Wanngal clan would have had access rights to the resources of the Homebush Bay area, but would have routinely interacted with neighbouring clan groups. Whether the Wanngal clan spoke the Darug language or Eora (a separate language or possibly a dialect of the Darug language) is unclear.

The first European explorations of the Homebush Bay area occurred within weeks after their arrival in Port Jackson in 1788. Contact with Aboriginal people in the specific area of Homebush Bay is not recorded in these early explorations, though the open nature of the woodland in the area, possibly the result of Aboriginal burning practices, was noted.

With the establishment of the Rose Hill (later Parramatta) settlement in late 1788, there is likely to have been heightened contact between Aboriginal people and Europeans in the Homebush Bay area, then known as The Flats. Traffic along the Parramatta River and Parramatta Road, as well as the many escaped or lost convicts and marines who strayed into the area is likely to have resulted in such contacts, however there do not appear to be extant historical records of any such encounters.

With the devastating smallpox epidemics which claimed many Aboriginal lives in the Sydney area in the late 1780s, drastic changes to the cultural and social organisation of the Sydney clan groups took place, including the amalgamation of some clan groups to ensure continued survival. Interaction between European settlers and Aboriginal people after the smallpox epidemic and prior to the granting of lands at Homebush Bay is illustrated by Balloderry, a young Aboriginal man, possibly of the Wanngal clan (although his clan affiliation is currently unresolved).

Balloderry and others established a trade in fish with the farmers in Parramatta in 1791. The trade was successful but short lived, following the destruction of Balloderry's canoe by convicts at Parramatta. Balloderry later speared an escaped/lost convict (unconnected with



the incident) in retaliation. The spearing took place at the Flats (Homebush Bay) and demonstrates that the area was still frequented by Aboriginal people in the early 1790s.

The 1790s and early 1800s saw the appropriation of Aboriginal lands in the Homebush Bay area, starting with the Liberty Plains grants along Powells Creek in 1792, on the southern edge of Homebush Bay. By the mid 1790s, many small grants had been established within the Homebush Bay area as well as on the Rhodes Peninsula and the northern bank of the Parramatta River.

It appears that many of the land grants in Homebush Bay were not subject to intense agricultural activity in the 1790s and some may have been held merely as investments. Many of the grants changed hands (some several times) in this period and descriptions show that many were largely uncleared and/or unoccupied. The implications of this for the continued usage of the area by Aboriginal people is unclear as there are scant historical records for this period, however it does suggest the possibility that Aboriginal people may have continued to reside in or use granted or ungranted areas of Homebush Bay.

By the 1810s, the whole Homebush Bay area was divided (by Haslams Creek) into the Newington estate of John Blaxland and the Homebush estate of D'Arcy Wentworth. It is known that Aboriginal people worked on the Blaxland farm and traded fish with the Blaxlands in the 1810s, although it is not clear whether these were local (Wanngal) people or not. It is also not known whether these people lived on or adjacent to the farm, but does demonstrate continued usage of the area after European settlement.

Although large portions of the Newington estate remained uncleared up into the 1850s, it is not known whether this allowed Aboriginal people to continue using the area. The 1828 census does record that Aboriginal clans were living at Parramatta, Richmond and Liverpool and these may have been related to those from Newington. The "Returns of Natives" taken between 1832 and 1843 confirms the presence of several hundred Aborigines round Sydney including a tribe at Duck River. By 1840 when Louisa Meredith wrote her descriptions of Homebush Bay, she does not mention any Aboriginal groups in the area.

Although Aboriginal people from other areas of Sydney are known to have visited the Homebush Bay area after this time, regular usage of the area by Aboriginal people appears to have ended by the mid-nineteenth century. This is however currently the subject of ongoing research commissioned by the Sydney Olympic Park Authority, which may uncover evidence to alter or refine this view.

#### **2.4.2 Settlement**

The Parramatta River was the first area after Port Jackson to be mapped and charted. Only 10 days after landing at Sydney Cove, members of the First Fleet were exploring the areas to the west in search of suitable land for farming and reliable sources of water. A settlement was established at Rose Hill by the end of 1788. It was renamed Parramatta by Governor Phillip when he ascertained that that was the Aboriginal word for the head of the river.

The first land grant in the Colony was to an ex-convict in Parramatta. Within a year the population was 1,970, which was half the total population of the colony, most of whom were

convicts. The area developed as a midway point between the Hawkesbury farms and settlements and Sydney Cove. The Parramatta Road, built in 1794 became a major thoroughfare and trading route, which competed with the river as the main access and transport corridor. The Governor established a second residence at Parramatta and considerable money was spent on a formal town plan, building churches and public buildings.

The viability of the colony depended on the development of farms and the production of crops and livestock. By 1791 Phillip was granting acreage to well-behaved convicts and the militia in an effort to increase farming production. The lands between Parramatta and Sydney began to be settled soon after the establishment of the town of Parramatta. Small land grants were made at Newington from 1797 with two small grants of 25 acres to Captain Waterhouse and Lieutenant Shortland of the militia. In 1800 an adjoining grant of 80 acres was made to an Isaac Archer. These grants faced the river, and were situated across the present site. In 1806 Samuel Haslam was granted land on the Parramatta Road.

The fate of these smallholdings was the same as that of most of the early grantees, who had no capital and were too small to remain viable. Many of the early farmers were inexperienced and practising intensive farming practices unsuited to Australian conditions on marginal land. They were eventually replaced by men of influence and capital who could afford to experiment, invest and purchase breeding stock, and who were favoured by the granting of large expanses of prime land.

In 1807 John Blaxland was granted 1290 acres at Newington and immediately purchased the smaller holdings along the riverfront. Blaxland was a free settler, a man of some wealth willing to invest 6000 pounds in the colony in return for free passage; a land grant and 18 months of convict slave labour at Government expense. The Colonial Office thought Blaxland an appropriate person to encourage in the settlement, as he was a man of 'property and education'. (ADB:117)

The Newington grant comprised all the land between the Parramatta River and Parramatta Road, between Duck River and Haslams Creek. Blaxland developed a fine home on a rise within the area, which is now part of Silverwater prison, and began to establish a series of industrial and pastoral enterprises on the property. The area where the Armament Depot is situated was probably initially used for grazing or collecting timber. Blaxland does not appear to have utilised the wetland and no roads or tracks ran through his property in this area.

The history of the Newington estate is a familiar story for the mid decades of the nineteenth century. The recession of 1840 saw the family mortgage and sell the property. After the death of John Blaxland the main house and areas close to it were then re-purchased by the family, but remained too costly to keep. Land was then leased to numerous small industrial ventures such as slaughterhouses, timber cutters and other tenants. The house meanwhile was turned into a school and then an asylum before it was sold again. This tolls the end of the area's pastoral association, as the city grew closer and rich farming lands were available elsewhere with good transport, the marginal areas round Homebush were no longer considered necessary. The new owner, a John Weatherill bought the property with an eye to subdivision. It was never successful and eventually the site reverted to government control in 1880.

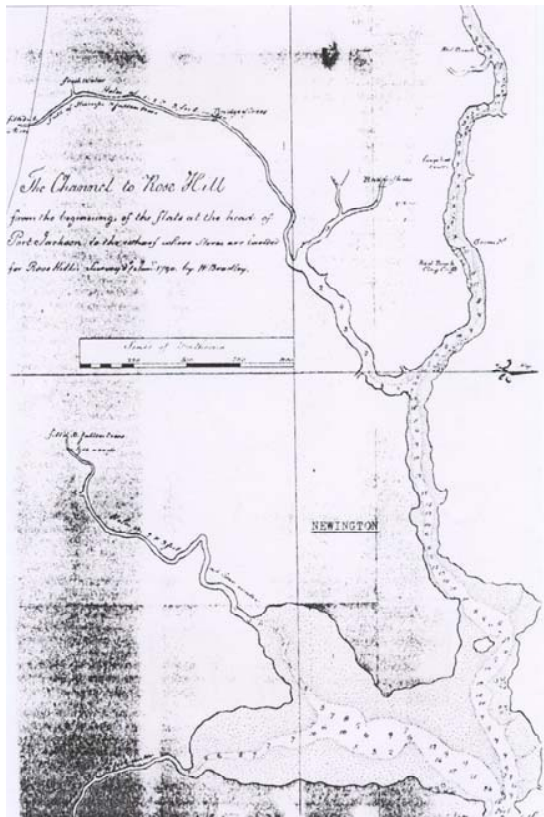
## 2.5 The Changing Environment

### 2.5.1 From an Aboriginal to European Environment

The environment around Newington has changed enormously since members of the First Fleet began to explore and chart the Parramatta River. Governor Phillip and Lieutenant Bradley were the first to write about the area around Newington, after an exploratory trip in 1788.

We proceeded to the beginning of the flats, where we landed and went 2 or 3 miles into the country. Found the trees a considerable distance apart and the soil in general good – grass very good and no underwood. After dinner went in the smallest boat over the mudflats past a mangrove island and followed a creek some distance to the westward.

The mangrove island, which they describe and which is drawn on Bradley’s 1790 map of the Parramatta River, has now been incorporated into the river foreshore (see **Figure 2.1.**). The Aboriginal name of the island was Arrowanelly (Attenbrow 2002:10). The shape of the foreshore has been smoothed and defined with stonewalls and the course of the river straightened.



**Figure 2.1.** Lieutenant Bradley’s 1790 map showing Newington and the mangrove island offshore. Fox and associates, 1986

In 1827 Richard Cunningham described the Cumberland Plain area;

In Cumberland, the land immediately bordering upon the coast is of light, barren, sandy nature, thinly besprinkled with stunted bushes; while from ten to fifteen miles interiorly it consists of poor clayey or ironstone soil, thickly covered with our usual evergreen forest timber and underwood.

Between the two descriptions, 39 years apart, several assumptions can be made about the changes to the lands along the Parramatta River. The striking change between the two descriptions is the comments on under-wood. The land that Phillip and Bradley saw had trees spaced a good distance apart and no under-wood to stop grass from growing. Cunningham who roamed all over the Parramatta area saw a thick forest with under-wood.

James Kohen has said of these changes observed by early writers:

It is clear that it was primarily Aboriginal burning practices, which maintained an open environment dominated by well-spaced trees and grass. Once the Aborigines stopped burning, under brush grew where none had previously existed. (Kohen, 1995:41)

Fire stick farming, as the practice of burning by Aboriginal people is called, was used to create passage through the forest and encourage the movement of animals for hunting. The grassy, park-like landscapes, which were discovered by explorers like Major Mitchell, are assumed to have been the result of fire stick farming. The settlement of Europeans stopped this practice for fear their stock, homes and lands would be burnt. Parts of the bush, which might have been changed in response to fire stick-farming practices, therefore began to revert to that dense character which is familiar from the woodland areas on the site today, and which might have characterised the structure of the plant community without such practices.

The MPHP woodland, although never completely cleared had been thinned by timber cutters, and was used for the grazing of sheep and cattle by the Homebush Abattoir and then kept mowed and clear of understorey plants by the Navy who were concerned with reducing fire hazard. The woodland has not been cleared or mowed since 1981 and since then there have been noticeable changes. Today the woodland has a fairly well-developed understorey, with some fallen timber on the ground. If the area is not cleared but is subject to management that includes weeding and ecological burns it will probably regain structural and floristic characteristics closer to its earlier natural character.

### **2.5.2 From a Pastoral to Military Environment**

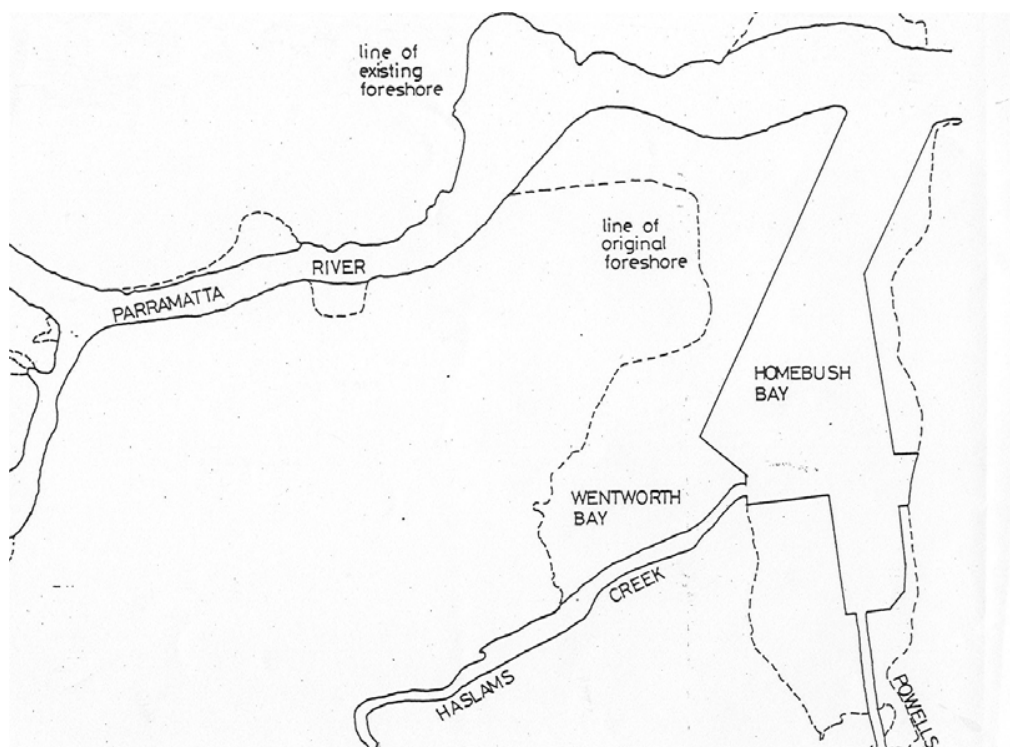
From the period of settlement by Europeans until 1840 the environment of the future MPHP was subject to clearance and the beginning of land reclamation works along the river's edge. Thirty years of pastoral and light industrial activity and the ever-growing numbers of settlers in the area had by 1840, left the land in a state, which was probably similar to the grasslands area of the site now. Louisa Meredith, who lived at *Home Bush* where the Sydney Olympic Park is now, described the area as completely empty and denuded.

The house stood on the highest ground on the estate and for some hundreds of acres all around not a native tree nor even a stump was visible, so completely had the land been

cleared. (Meredith, 1973:56)

Although it was largely cleared, she describes the area as having a lot of remaining wildlife. She writes of the plentiful dingoes in the area, possums, flying foxes, goannas, lizards and snakes. Most of these, it is presumed were living in the uncleared or less disturbed areas of mangroves, wetland or woodland of the MPHP site and other parts of Homebush Bay.

Estuarine wetland was once the dominant environment of the area and still dominate this part of the Parramatta River. **Figure 2.2**, clearly indicates that the line of the foreshore as it exists today has been changed significantly from the original foreshore in many places. Early survey plans indicate that areas reclaimed consisted in the main of saltmarsh wetland, described in 1890 as “pigweed swamp with mangroves and oaks in patches” (Fox & Associates, 1986).



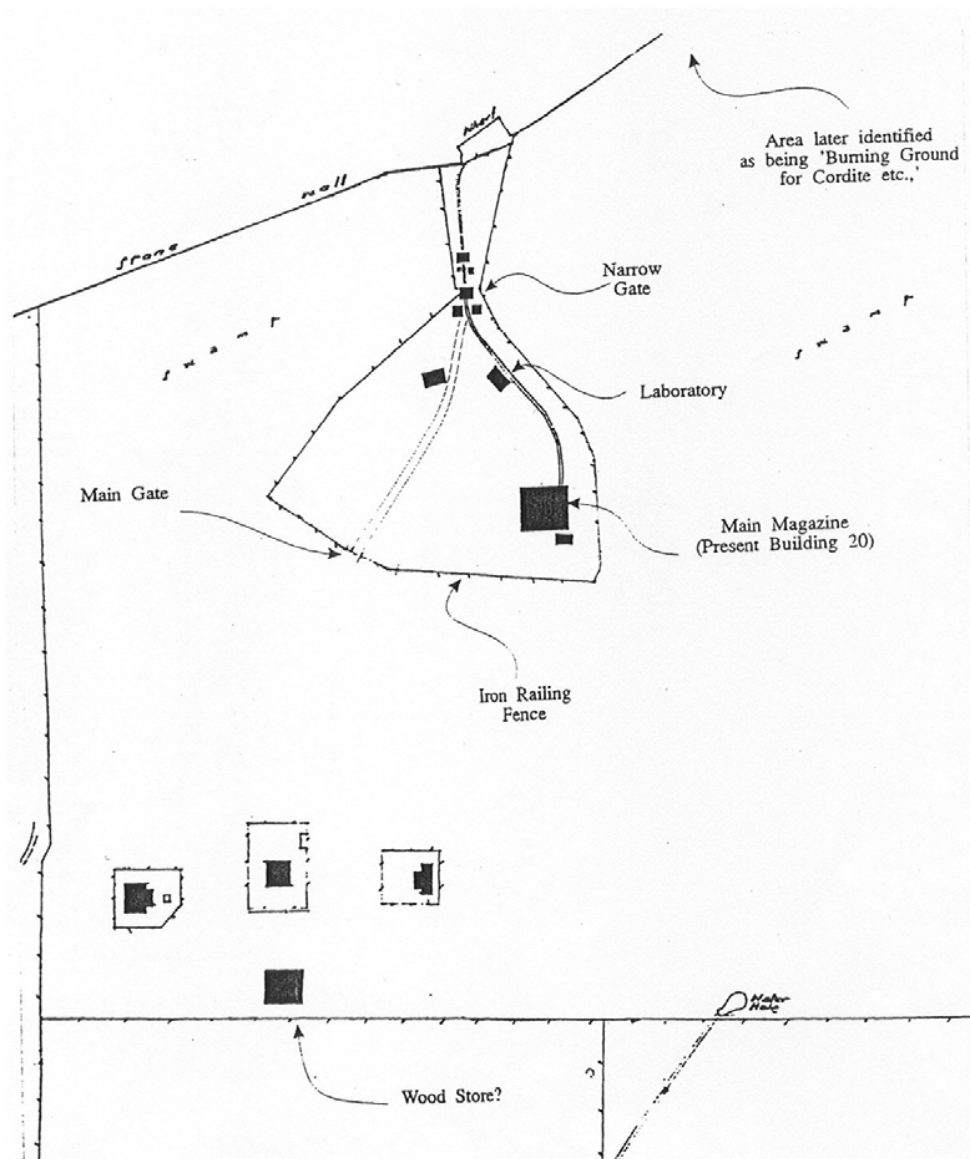
**Figure 2.2.** Line of Original Foreshore  
Fox and associates, 1986

This wetland, remnants of which survive on the site, have been partially preserved by the perception that they were of no use to sheep or cattle or man. The focus in the early years of the colony on food production saw the mangroves and salt marsh overlooked as grazing land suitable for hoofed animals, and were therefore left uncleared. When the government resumed the area for the Powder Magazine in 1882, most of the 248 acres was mudflats, swamp, mangroves or salt marsh.

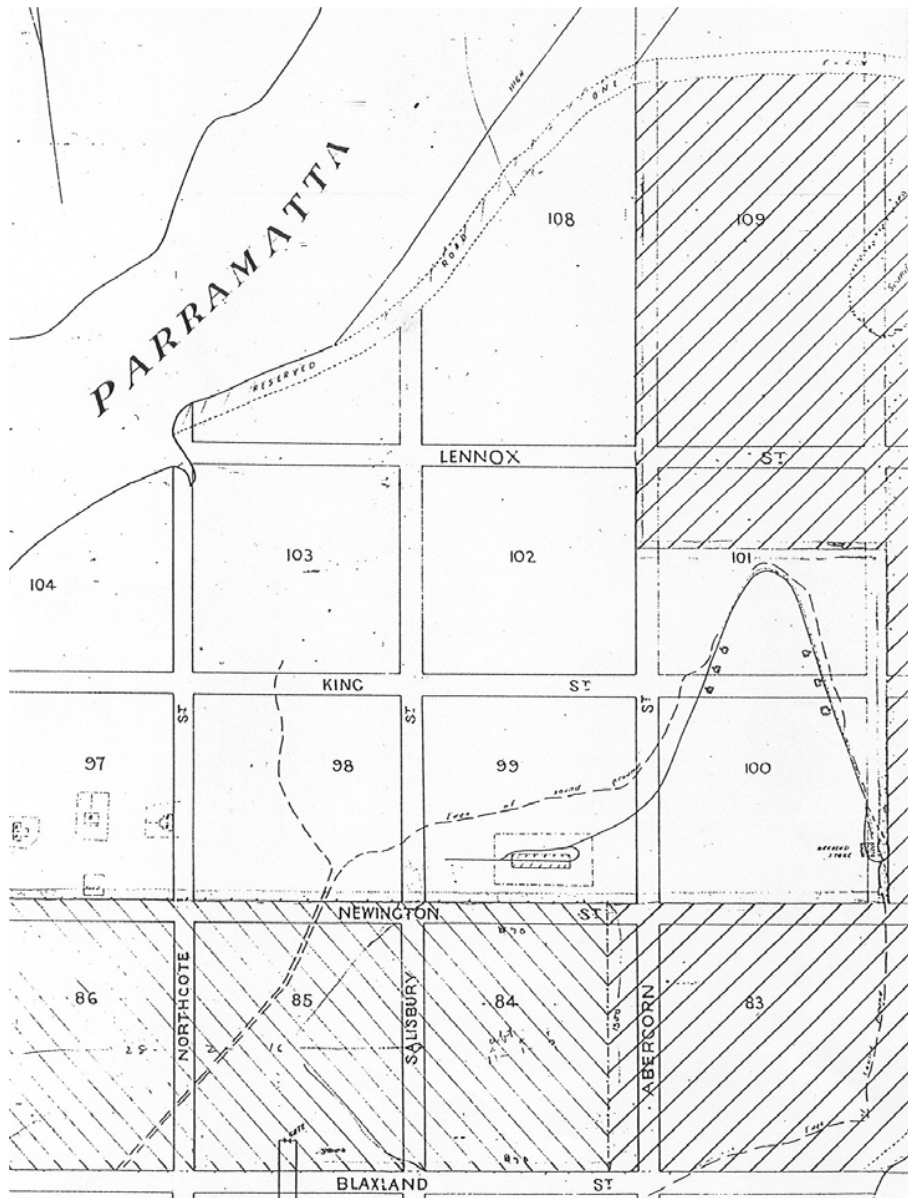
In 1889 large-scale reclamation works were begun on the site, which saw almost 200 acres of mud flats drained, the foreshore straightened and banked and by 1893, two miles of fascine banks had been constructed. Even though hundreds of acres of land had been reclaimed, the areas directly behind the riverbank were still considered unsuitable for extended building works. This unsuitability however made the area ideal for the polluting and dangerous work of disposal, burning and testing of armaments and explosives.

The topography of the site was largely the reason the site had been left unsettled for so long, and also the reason it was initially seen as unattractive for the erection of a public gunpowder magazine in the 1880s. It was isolated and it had good water access, but it was also marshy and boggy and a long way from the Harbour. Once resumed by the Government the land became subject to more and more reclamation. Reclamation of the wetland continued on the site through the 1930s and into the Second World War. Thousands of pounds were spent to drain the soil and raise buildings and infrastructure above the water logged ground.

The higher and drier areas directly to the south of the wharf, and parts of the wetland to the east were leased by the adjacent Homebush State Abattoir, which ran sheep and cattle in resting paddocks. In 1928 the Abattoir gave the eastern areas back to the magazine and then in 1938 and 1941 all lands were resumed for military uses. The effect of the Abattoir's stock on the environment of the site is hard to gauge, but would almost certainly have kept the area clear of undergrowth. The dearth of native trees in the grassland area was probably due in large part to the use of stock by the Abattoir and later by the military for fire prevention, as well as the mowing regime of later years. In parts of the site today, along the western and southwest boundary of the woodland where mowing ceased in the 1980s, there has been some natural regeneration of native species, where propagules have remained in the soil, or from seed spread into the grasslands area from the woodland.



**Figure 2.3.** Plan of Original Layout of the Powder Magazine c. 1900  
Schwager Brooks and Partners, 1996



**Figure 2.4.** Plan of 19<sup>th</sup> Century subdivision, which never went ahead, with early Depot buildings and light rail, Schwager Brooks, and Partners 1996



### **2.5.3 From Industry to Ecological Restoration**

From the late nineteenth century until 1980, the management and treatment of the area epitomised the then-prevailing Australian attitude to natural wetland. Homebush Bay and surrounding areas were seen as convenient wastelands for the dumping of industrial and household wastes. The history of industry round Newington had started with Blaxland, then Government industries such as the brickworks, abattoirs and powder magazines at the turn of the twentieth century. These industries were intrinsically polluting and with no environmental controls, draining of wetland, dumping of toxic wastes and pollution of the air by burning, was commonplace.

In the 1960s and 1970s uncontrolled dumping of wastes was common in the Homebush Bay area, and to the east of the woodland. Seepage from contaminants including chemical residues, metals and 3000 cubic metres of tar waste flowed into the salt marsh of the site, and were trapped by the sea wall.

Within the wetland, the Navy used the salt marsh as a convenient site for testing or proofing faulty ordnance and dumping of wastes connected with proofing activities. Two burning grounds were also situated on the site, one in the woodland and another in the wetland, where explosives and armaments were destroyed in metal lined pits.

The bid to win the 2000 Olympic and Paralympic Games featured a strong commitment to the environment. The Sydney 2000 Bid Committee in 1993 made a commitment to ecologically sustainable development, which would be demonstrated in the conservation of species, resources and the control of pollution. With the announcement of the Sydney 2000 Olympic Games, and the choice of Homebush as the main Olympic venue, the remediation of Homebush Bay became an urgent priority, and this program was used to demonstrate new environmental attitudes and commitments.

The remediation works commenced in 1992 and were complete in 1997 included the treatment of 155 hectares for soil and ground water contamination and has resulted in a number of awards recognising environmental achievements. This change in attitude to the wetland environment followed the development of a worldwide conservation movement, which in Australia began gaining political prominence in the 1980s. In 1992 the Earth Summit in Brazil brought the issue of ecologically sustainable development to the forefront of government policy as Australia was roundly criticised for its history of environmental damage. With the announcement of the 'Green Games', the issue of cleaning up Homebush Bay became an urgent priority for the NSW government. The imminent departure of the Commonwealth Government from the RANAD Depot also caused concern about future management, since the exclusion of the public for many decades had already left an important cultural legacy.

A program of restoration ecology was planned which aimed to conserve and restore the natural values of the site. This has involved the opening up of the sea wall of the wetland to allow tidal flushing of the salt marsh and mangroves, and construction of a large waste mound to the east of the site to contain contaminated soils. Areas to the west of the wharf area which had been used as an asbestos dump were also reshaped and cleared with new landfill changing the topography on the western boundary. The southern portion of the

former RANAD site was chosen as the site of the Olympic Village. Remediation and development of the area required the removal of all but two explosives storehouses from the site and the construction of the new Holker Street extension between the northern and southern sections. The Village was designed with ecologically sustainable development principles and has since won a number of awards.

This major change in attitude about the environment also encompassed a new understanding of the effect of Aboriginal land management techniques. The structure and floristics of the woodland area, with its now well developed understorey can now be assessed as regeneration towards a state more closely approximating its natural condition, with fires at less-frequent intervals than the regime instituted by Aboriginal people. The new environmental awareness of Australians and the value attached to the restoration of these small natural areas has added a new and very important quality to MPHP, which gives it enormous value. The importance of these small remnants of ecological communities that once covered large parts of the Sydney Basin is reflected in the gazettal of the natural areas as Newington Nature Reserve.

## **2.6 Defending Australia**

In the history of the site since European settlement its occupation for military purposes over the last 100 years has left the greatest impact on the landscape and quantity of built structures. The long and involved history of military development, land acquisition and building on the site has been documented in great detail in the chronological history, contained in Appendix A. The chronological history was compiled prior to 1997 and so includes the southern portion of the site, which is now part of the suburb of Newington. This section will take the site and place it into the broader context of the Sydney Ammunition Pipeline and the history of the Sydney Defence network.

In 1833 the first colonial gunpowder and explosives magazine was erected at Goat Island. In less than a decade it was found to be inadequate for storing civilian and military stock and an additional magazine was constructed on the island for civilian stock. In 1863 this was also deemed to be overcrowded and so another magazine was built at Spectacle Island, further down the Harbour away from the centre of population.

By the 1880s it was recognised that another magazine should be erected further away from the expanding urban settlements of the Harbour. Newington had been mooted as the site for a magazine as early as 1875, but there was reluctance to commit to a site so far from Rose Bay powder ground, the waterlogged land required major reclamation and the narrow, busy passage down the river was a risk to shipping. By 1880 the overcrowding at Spectacle Island had reached crisis point and plans were drawn up to build a new magazine at Newington.

When built in the 1890s, Newington Powder Magazine was managed by the Ordnance and Barrack Department. At the time of Federation, control passed to the Army and the site languished for many years. In 1921 control reverted to the Navy who assessed the site as being suitable for only a proportion of the reserve ammunition which it was necessary to keep in Australia, i.e., 2 complete outfits for each ship on the station and 2 years practice ammunition. The Navy was initially reluctant to take the site as they felt it was too small for their needs, however by 1922 works had commenced on new buildings. By 1924 the Navy

was requesting that more land be made available from that which was leased to the State Abattoir.

The growth of the facility not only reflected the pre-eminent position of the Navy, which was building its presence in Port Jackson, but also the increasingly threatening international situation. After a decade of constant building the development of the site eased during the Depression. Then in 1938 with an accelerating situation in Europe, and concerns about the growth of Japan's military, the RAN's expansion was reignited. More land was acquired from the State Abattoir and new buildings were planned to separate domestic buildings from storehouses. Reclamation works were undertaken with Unemployment Relief Scheme funds and the Armament Depot reached its period of peak production as the Second World War was declared.

### **2.6.1 Naval Defence in Sydney**

The dominant influence on Australian naval capacity until the start of the Pacific War in 1941 was the Royal Navy (RN). Even after its formation in 1911, the Royal Australian Navy (RAN) was in effect a colonial arm of the British Navy, using British ships, stores and ordnance. This situation developed in the colonial period when Sydney was the centre of British imperial power in the Pacific. From 1859 the RN operated The Australia Station from Sydney, and gradually made substantial progress to enhance its position in the Pacific. The Australia Station had been configured to conduct trade protection and local defence for Australia and to provide reinforcement to the British fleet in the Pacific. With this in mind the primary function of naval facilities in Sydney was the provision of supplies and support to Admiralty ships.

The Second World War changed the way Australia thought about and prepared for her defence and the way the RAN functioned in the Harbour. The war threw the development of defence emplacements along the coast and Naval support facilities in Sydney into overdrive. The arrival of thousands of ships of the Allied Forces and merchant navy impacted on not only the docking facilities but also the armaments bases, supply stores and munitions factories in the Sydney region.

The Newington Armament Depot was part of a network of naval sites in Sydney all of which were capable of dealing with RN technology, ships and supplies. Of the three islands in the Harbour, which had historically been used for naval purposes, Spectacle Island was most closely associated with Newington. Spectacle had first been surveyed for a powder magazine in 1863 and from then on was entirely given over to the storage of naval armaments, supplies, archives and gunpowder. Spectacle was considered ideal for the storage of gunpowder being close to Garden Island and Cockatoo Island and yet some distance from central Sydney. As Sydney grew along the Parramatta River, this perception changed and after the construction of Newington Powder Magazine, Spectacle Island was used for the temporary storage of explosives or empty packages. Explosives were stored on the concrete lighters, which were towed back and forth from the docking facilities at Garden Island and Cockatoo Island to Spectacle Island to Newington.

Cockatoo Island, which began life as a prison for recidivist convicts, was converted in 1846 to a dry dock for visiting RN ships. The RN wanted autonomy from commercial dry dock

operators such as Mort's Dock, so Governor Gipps supported the construction by supplying convict labour. Dock facilities were upgraded around 1890 as a response to agitation for Australia to develop its own Navy separate to Britain. In 1913 control passed to the Commonwealth as a naval base. The Cockatoo Island dockyard, which was the only naval establishment of its kind, was able to accommodate large ships.

All ships entering the Harbour were required to be de-ammunitioned prior to work being undertaken in dock. The ammunition from ships was then transported to Newington for storage. Ships returning from exercises or engagement would be rearmed at Garden Island with stores bought from Newington. (Godden MacKay, 1997) During World War II the Cockatoo Island dockyard played an important role in the repair of RAN and USN ships damaged in the Pacific War. The number of ships being armed and disarmed can be inferred from the statistics of ship docking Australia-wide. Between 1939-1945 there were 5,127 dockings by naval ships in Australia, most of these occurred in Sydney which was the main base for allied fleet operations in the Pacific after the fall of Singapore. Of these 4,008 were RAN, 391 RN, 513 American, 171 Dutch, 44 French and 11,987 merchant ships. Many of these merchant ships were bringing supplies of weapons and armaments and raw materials for the production of munitions. This again required the involvement of Newington in the store of cordite and other explosive items.

Cockatoo Island was worked at a stretched capacity throughout the war with an increasing number of damaged ships limping through the heads as the Japanese advance was met with allied aggression. Garden Island was busy converting civilian ships into troop carriers and in 1940 the government announced that a naval graving dock would be built there. This was ostensibly to provide support to RN ships, although Prime Minister Menzies appeared to have longer term plans for the RAN when he announced that this dock would "make Australia a fit base for a powerful fleet."

Garden Island was first used for naval purposes in 1789. Between 1856-1865 the Navy assumed a greater role in the defence of the colony as Imperial troop numbers in NSW were reduced. In 1859 construction began of the Australia Station as a permanent base for the Navy. The *Colonial Naval Defence Act, 1865* was the first legislation to provide for a colonial naval defence policy, and from then the establishment of the Navy in Sydney was complete. Through the 1870s and early 1880s the cost of funding the defence of the Australian colonies was argued between the Imperial and Colonial governments. It was finally agreed to that the construction of a naval depot would directly support a fighting force at sea and that the Admiralty would build a depot funded by the colony. This of course required construction of an armament depot for the safe storage and distribution of munitions and explosive ordnance. Once Garden Island became the Australia Station, Newington became a vital part in the naval network.

During the Second World War, maintaining supplies of ordnance and stores was a major problem for the allies in the Pacific, given the distance from the places of production in Europe and America. Allied stores depots were developed in Australia to ensure constant supply during times of peak usage and eventually covered some 700 acres. Stores included supply stores such as Rydalmere across the River from Newington, which was resumed in 1943. Rydalmere was the main supply store for the US army and HQ for the army supply

services. Seven large Nissen style warehouses and a timber wharf were constructed, which have now been demolished.

The Navy did not, at the end of the war, begin disposing of assets and land. Newington was still on a full contingent of staff and storage capacity was full for several years after the war. By 1967 the Commonwealth controlled about 1.3 km of Harbour foreshores for both military and naval purposes. The administrative and personnel quarters located on parts of Middle Head and South Head, the North Head fortress and Artillery School, together with waterfront industrial naval uses, occupied about 420 hectares. In addition, 280 hectares were held as reserves of largely vacant land on Middle and North Heads, lending a distinctive undeveloped woodland and bush character to parts of Port Jackson and its Harbour side suburbs. Much of this land has now been incorporated into the Sydney Harbour National Park. In 1992 Cockatoo Island dockyard was closed. In 1993 the islands of the Harbour not specifically used for storage purposes were also placed under control of the National Parks and Wildlife Service. Newington was officially closed in 1997 and the Navy has since moved the bulk of its administration and other facilities to Jervis Bay on the southern coast of NSW.

## **2.6.2 The Sydney Ammunition Pipeline**

Newington Armament Depot was an intrinsic part of a defence system, which was known as the Sydney Ammunition Pipeline. This pipeline was vital to the continued efficient functioning of the navy in Port Jackson. Warships are required to be de-ammunitioned before they enter dockyards for maintenance, as a basic safety precaution. At the conclusion of maintenance, warships have to be re-ammunitioned with either new, different or the same stock. Many naval ships would enter Port Jackson with spent ammunition that had to be replaced and existing stocks checked for quality and safety. The pipeline was designed as a system to ensure that ships could be made safe for docking and repairs, provided with new stocks of ammunition, and rotating stocks of ordnance supplies.

Since the Second World War, the Sydney ammunition pipeline originated at the foot of the Blue Mountains at Defence Area Orchard Hills (also known as Kingswood). This complex houses the RAN Armament Depot and guided weapons maintenance facilities. For ammunition to be provided to ships in Sydney Harbour, it was loaded onto semi-trailers for road transport to RAN Armament Depot, Newington. Here the ammunition was transferred from semi-trailers onto concrete lighters and towed down the Parramatta River to Sydney Harbour where it was loaded on board warships at special ammunitioning buoys near the fleet base at Garden Island. During WWII the pipeline encompassed, Newington, Spectacle, Cockatoo and Garden Islands, creating a chain of naval sites from the upper reaches of the river to the Harbour.

In 1981 the Department of Defence adopted NATO safety principles for the storage, transport and handling of explosives. These NATO safety principles make the use of separation distances or quantity distances mandatory. The greater the quantity of explosives held the greater the distances required to separate explosives. These distances were laid down in regulations and defined as arc distances. The efficient functioning of the Newington Armament Depot was greatly compromised by these new regulations. The existing infrastructure and the increasingly dense settlement around the Armament Depot meant that it could not physically expand any further and so its closure was a *fait accompli*.

The Department of Defence had been interested in relocating the functions of the Newington Armament Depot to another facility since the 1960s. Closing Newington meant closing the Sydney ammunition pipeline, and establishing another East Coast Armament Complex either at Point Wilson in Victoria, Twofold Bay near Eden or at Port Alma in Queensland. Cockatoo Island had closed in 1992, which had greatly reduced the volume of warships coming into Sydney Harbour, and many naval operations were gradually transferred to Jervis Bay. The Sydney ammunition pipeline closed in December 1999.

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## 3.0 Nature of the Resource

### 3.1 An Integrated Natural and Cultural Landscape

The natural landscape of MPHP comprises three general areas; grasslands, wetland and woodland. Within these landscapes are numerous buildings, transport systems and landforms. The entire landscape of MPHP has experienced varying degrees of cultural modification. But despite many changes the natural features of the landscape and their underlying ecological processes remains of significance, alongside the cultural features. The wetland for example, is still enclosed by a fascine dyke and stone sea wall, which expanded parts of the original foreshore and led to the reclamation of the lands behind which are now being managed for reinstatement of the wetland values.

Within this landscape the built elements and infrastructure are integrated into the woodland, hillsides, wetland and grasslands. Each has been shaped by, or in response to the other. In many places, the natural landscape has been dug out, torn down, reshaped and revegetated to suit the site's occupants. The built elements have been sited and laid out in a manner that responds to the topography. The areas of woodland and wetland that have not been disturbed by construction acted as protective buffers and screens for the activities which occurred in them.

MPHP is therefore a thoroughly integrated natural and cultural landscape, and might be viewed from various perspectives as a landscape with many layers of meaning.

### 3.2 Natural Landscape

Much of the MPHP landscape is today very different to what it was before the advent of Europeans. Not only has the vegetation changed dramatically in the grassed areas, but the topography and limit of dry land has been radically altered. The rising ground of the Original Establishment Precinct at one stage joined the natural line of the woodland slope at a point which is close to the present crossroad. The landscape today remains gently undulating, and although there has been much reclamation of the swampland, mangroves and wetland, the original high water mark can still be seen at the base of the slope leading to Building 22.

Of the landscape areas of MPHP, it is the grasslands and foreshore that have been most altered. However as discussed in the thematic history (see **section 2.2**) the wetland and the woodland have also been affected by the actions of both Aboriginal and European occupiers. The natural attributes of the precinct that remain encompass the ecosystems, biodiversity and geodiversity, and the dynamic ecological processes that continue.

The grassland area is the most recent landscape, and is a direct product of European pastoral settlement and occupation by the military. The woodland, despite decades of mowing and understorey clearance, has now regenerated and probably demonstrates a species composition and structure closer to pre-Aboriginal times. Its range of habitats would have expanded considerably since the frequency of fires and slashing has been reduced. The construction of a fascine dyke and sea wall along the river, and the draining of the mudflats behind it have altered the wetland, and a program to reinstate an appropriate tidal flushing regime has been

initiated. The flora species in these two systems are however, mostly original and in general they retain the structure and appearance of natural remnants.

Within the remaining grassland precincts of the former Depot are a number of cultural plantings related to various stages of the European occupation. These include the scattered trees and open grassland character that remain from the historic use of the site as a golf course, and its subsequent adaptation to armaments storage depot. Specific cultural plantings related to the Depot use are largely confined to the major row of camphor laurel trees lining the old entry driveway from Jamieson Street. There were some small fenced gardens around buildings 122, 123, and 126 but these have largely disappeared. Plantings associated with the post RANAD phase are limited to some low level screen planting around parking areas behind building 122.





**Figure 3.1.** The Wetland located at the north eastern end of the site, 1996  
Schwager Brooks, and Partners 1996



**Figure 3.2.** The Woodland located in the centre of the site

### 3.3 Cultural Landscape

Many aspects of the landscape of MPHP have been formed and reformed by human interference and manipulation. MPHP was a culturally influenced landscape well before Europeans invaded Aboriginal lands. Stone artefacts found in the woodland and at Newington provide evidence that Aboriginal people utilised the site if not for food gathering and hunting then at least for the making of implements. That which we see today is probably quite different to that which the first Europeans saw.

The cultural landscape of the site consists of areas of wetland, foreshore, grasslands and woodland and Armament Depot infrastructure and buildings. The buildings and infrastructure are spread right across MPHP, within the woodland and wetland areas as well as in the open grasslands. The buildings are generally grouped in terms of their function and date of construction and linked to each other and the wharf by roads and light rail.

Since the 1996 *Heritage Assessment of RANAD* by SBP the cultural landscape of the original Armament Depot has changed enormously. The number of buildings has been significantly reduced and the parts of the original area of the site have been developed for the Olympic Village (now known as the suburb of Newington) and parts of the Parklands.

The SBP analysis of 1996 described the cultural landscape of the Armament Depot in terms of the industrial functions and processes of armaments work. This they broke down into two primary functions; the receipt, storage and dispatch of stock and the maintenance of stock. In order to carry out these primary functions a number of different processes were required:

- Handling, lifting, transporting and storing
- Inspection, quality control and repair
- Administration and record keeping
- Staff amenities

These functional categories informed the inventory of the structures, each of which was described with one of five interpretive themes:

- Armament Storage
- Inspection & testing
- Depot Administration
- Staff Facilities
- Transportation Infrastructure

The definitions of the process and functions of armaments work have been retained in this report, with the interpretive themes playing a large part in the precinct analysis.





**Figure 3.3.** Casuarinas which border the Wetland



**Figure 3.4** The “Burma Road” formerly connected the Depot with the Abattoir lands Schwager Brooks and Partners, 1996



**Figure 3.5.** Original Gun Powder Magazine (20) with protective earthworks



**Figure 3.6.** Light rail cutting with open grassland in the centre of the site



### 3.4 The Buildings

There are approximately 108 buildings located within the current MPHP site. When SBP conducted their *Heritage Assessment of RANAD* in 1996 (see 2 Volume Heritage Inventory April 1996, held in SOPA Library) there were at least 200 on the larger site, some of which were portable or temporary. The development of the Olympic Village (now the suburb of Newington) on the southern portion of the site necessitated the removal of all but two buildings to the south of the Holker Street alignment.

The major building types which have been lost are the RN Explosives Storehouses, a number of US Navy Explosives storehouses, and Inspection & Testing and Staff Facilities from areas to the south of Holker Street. The original southern gate to the Armament Depot was removed for the construction of the motorway in the 1970s. Most recently a number of demountable or portable buildings were removed by both the Commonwealth and OCA from the area near Jamieson Street and elsewhere on the site. All the functional category types are extant and the areas that remain are largely intact. There is one RN concrete storehouse remaining, Building .87. This is within the suburb of Newington, and outside the proposed NSW State Heritage Register boundary of MPHP. It is however intact and the only surviving example of the buildings constructed by Australians for the RN at the end of the Second World War.

The Armament Depot ceased functioning in 1999 and the buildings are no longer used for their original purpose. Some were put to temporary use in storing Olympic Co-Ordination Authority equipment and signage associated with the Sydney 2000 Olympics while a number of office buildings now house the Sydney Olympic Park Authority staff and contractors.



**Figure 3.7.** Original main receiving centre Building (143) and light railway



**Figure 3.8** WWII explosives storehouse (43) at edge of woodland.



**Figure 3.9.** A row of explosives workshops (130-134) with woodland backdrop



**Figure 3.10.** Non-explosives store at centre of site (22)



### 3.5 Moveable Items

Moveable items can be defined as items which are not fixed, such as tools, trucks, stores, safety equipment, signage, clothing, documents and ephemera. The Armament Depot possessed a large quantity of moveable items in 1996, most of which was removed by the Department of Defence in 1997. The 1996 Inventory did not assess the quantity of moveable items on the site, however the *Heritage Assessment of RANAD* listed types of items and of these a number are no longer extant.

The main items, which no longer exist, are the naval armaments, weapons and explosives, which was the Armament Depot's stock in-trade. Some of these items have been de-armed or emptied and retained as examples, while a number of explosive types and equipment have been given on loan from Spectacle Island Museum. The other moveables, which are no longer extant since the Department of Defence disposed of the site, are the concrete lighters and tugs which towed the stores from the Harbour, and the forklifts, cages and trucks used for transport. The light rail is intact with 40 trolleys and the 4-electro mobile engines. A large amount of signage, fire fighting and safety equipment is still extant in buildings, as is some of the furniture, some of the tools and lifting equipment of many of the workshops.



**Figure 3.11** Interior of workshop showing moveable items.





**Figure 3.12** Interior of workshop showing moveable items

### **3.6 Transportation Infrastructure**

The extensive Armament Depot transportation system is largely intact. The light rail and road system, wharf and pathways have all been retained north of Holker Street. There have been some changes to the east and west boundaries of the site since 1996 and these have affected roads round the perimeter. The newly named Louise Sauvage Pathway along the Narrawang Wetland has been reformed, as has the road, which follows the eastern extremity through the wetland. The road along the foreshore has been extended to the east and in parts, into the wetland, as has the road to Building 47 under Holker Street.

The line of the Burma Road, which extended to the southern end of the Depot, is still recognisable as a new road through the suburb of Newington, south of Holker Street. The light rail system is intact. The wharf is also intact.



**Figure 3.13** Electromobile on light rail, 2001.

### **3.7 The Industrial Process**

This section was originally written for the SBP *Heritage Assessment of RANAD*, 1996. That report was written prior to the construction of the Olympic Village (now the suburb of Newington) and the discussion contains information, which relates to buildings that are no longer extant on the site. All of Section 3.7 is taken from their report and reproduced verbatim here.

#### **3.7.1 Function**

Newington Armament Depot had two primary functions:

- The receipt, storage and dispatch of stock related to naval weapons systems.
- Ensuring that the stock matches and is maintained at the level of quality established at the time of manufacture.

When the stock or individual components such as used propellant cases was found to be defective, impossible to repair or past its normal service life, the Depot made arrangements for its disposal or destruction. In previous decades much of this stock had been disposed of within the Depot by burning or demolition. This practice had since been moved to other locations away from Newington due to environmental concerns.

In general Newington was never been used for the manufacture of explosive substances or armaments although some non-explosive components had been made on site. Ammunition has been assembled there from components made elsewhere.

### **Receipt, Storage And Dispatch Of Stock**

There were six principal aspects involved in this part of the Newington Depot's role.

A projectile either manufactured by ADI or imported was despatched to Newington. The first duty of the Depot was to ensure that the quality of the item as received equated to that established by the manufacturer. It was then the duty of the Depot to store the item in the manner that ensured the quality was maintained until it was again despatched to the "client".

All items, or a representative sample, were inspected when they were received to ensure that the stock as supplied matched the relevant documentation. This was required by the quality assurance procedures under AS 1199. The material was then transported to the relevant storehouse. There would be periodic surveillance inspections if it was to be stored for lengthy periods. The frequency of the inspection program depended on the anticipated rate of deterioration. This, in turn, was directly related to the conditions under which the material was stored. For example, cordite deteriorates more quickly at higher temperatures.

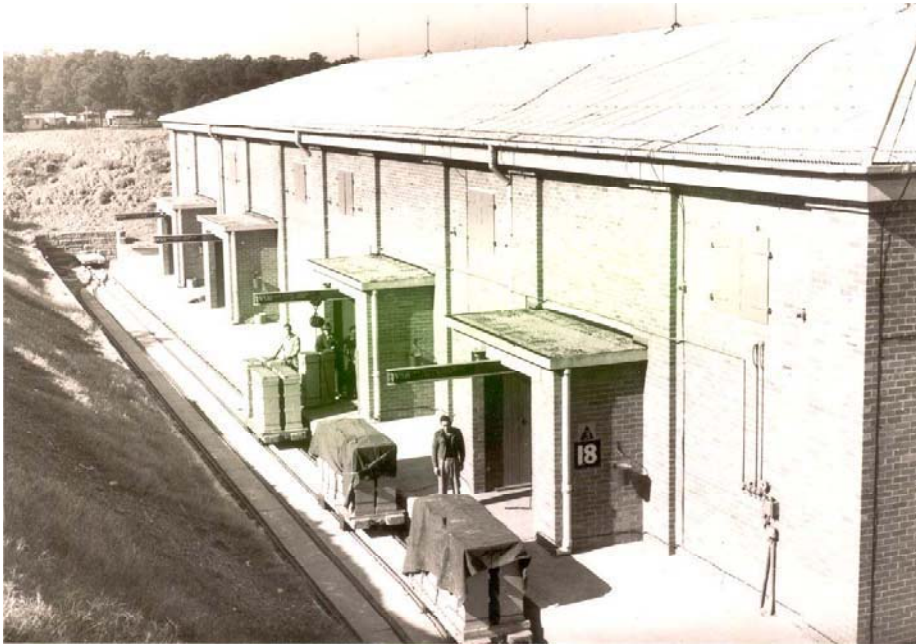
Before the projectile could be despatched to a client it must be fused, or defused if it had been returned from a ship. Projectiles were never stored with their fuses attached. When the stock was requested by a particular ship the Depot aimed to have enough in storage to avoid going to the workshops because this delayed the despatch rate.

Stock must be delivered in the correct containers and listed according to contents to facilitate handling and stock control. The ship removed the material from its packaging, resulting in a situation called "broken seal". Once a container had been opened it was assumed that someone may have tampered with the contents. Any stock returned to the Depot with broken seals had to be reinspected for this reason.

Some stock passed directly through the Depot en-route for storage elsewhere. The Depot ensured that this stock was properly prepared for land transportation in accordance with current explosives regulations.

The two depots at Kingswood and Newington worked in tandem. Because of licensing restrictions all high explosives (Rated as 1.1) passed through Newington to be stored at Kingswood.





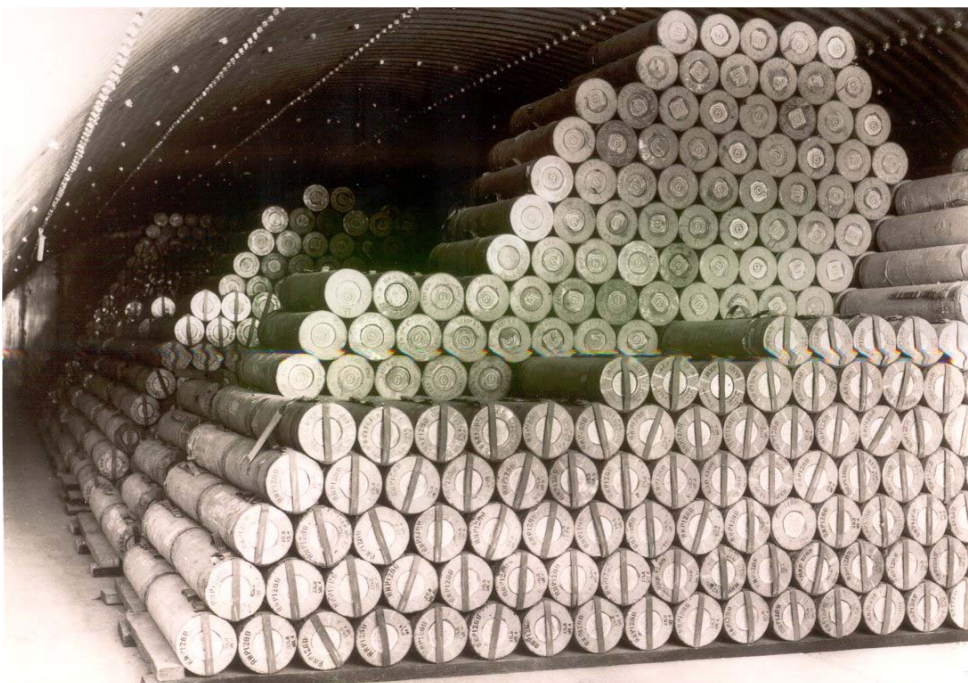
**Figure 3.14.** Unloading armaments at Building 18, 1950s  
Schwager Brooks, and Partners 1996



**Figure 3.15.** Interior of Building 26, 1950s  
Schwager Brooks, and Partners 1996



**Figure 3.16.** Steel Armco style US Navy Explosives Storehouse now demolished, 1950s  
Schwager Brooks, and Partners 1996



**Figure 3.17** Interior of Armco Explosives Storehouse, now demolished, 1950's  
Schwager Brooks and Partners, 1996

### **Maintaining The Quality Of The Stock**

This aspect of the Depot's work involved inspection, testing, repairs and disposal. The essential work processes at Newington had changed little over time except that quality assurance practices had grown increasingly stringent.

If a projectile had been damaged on a ship or in transit, the Depot had the capacity to make it safe using remote handling equipment. Damaged stock, for example those that are corroded, was disposed of, usually at another location. This work once took place at various locations within the Depot but environmental pressures required that most was disposed of elsewhere. There were two furnaces, (191 and 192) in the proof area at the eastern extremity of the wharf frontage where low capacity high explosives can be burned. There was a metal cube, gas fired, for burning small arms which do not generate a lot of smoke in deference to those living on the opposite river bank.

There were a number of burning grounds, which often comprised metal lined trenches.

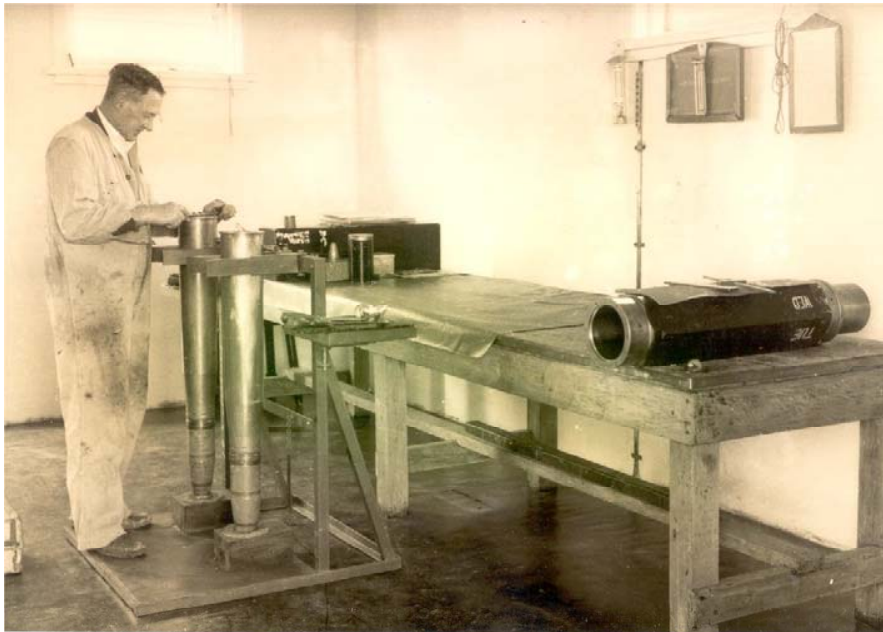
There was no disposal by detonation or disposal of lachrymatory agents such as tear gas or tearing agents at Newington.

Stock was checked and tested at the Depot and categorised as serviceable, repairable or required to be disposed. Faulty stock was generally repaired before it went to storage to avoid double handling.

The Propellant Management Organisation generally did breakdown work in Melbourne for the Navy. It may have been tested at Salisbury in South Australia. "Proofing" assured stores managers that the material would do the job for which it had been manufactured. Proof testing was often achieved by test firing of selected examples from batches of stock. Little sophisticated equipment for this purpose remained at Newington by 1996, in anticipation of its closure.

Recycling of ammunition containers was also carried out at the Depot. Redundant containers were sold as scrap, especially the brass shell cases. It was a profitable business for the Depot but the cases must be certified to be clear of explosive material prior to their sale. The brass cartridges were pulled apart to remove ferrous components such as firing devices.





**Figure 3.18.** Cartridge Examination in an Explosives Workshop, 1950s  
Schwager Brooks, and Partners 1996



**Figure 3.19.** Examination of a Shell Fuse, 1950s  
Schwager Brooks, and Partners 1996



**Figure 3.20.** One of the Proofing facilities near the river frontage of the site  
Schwager Brooks, and Partners 1996

### 3.7.2 Process

#### Materials Handling Techniques

Most of the munitions stored and handled at Newington were too heavy to be easily carried by workmen and too dangerous to risk careless handling. These two aspects generated a variety of handling techniques, which changed quite significantly over time, particularly as improvements were made to the mode of transportation.

The initial transportation via light rail determined the early layout of the Depot because of the need to exploit the limited amount of firm, level land. The widespread introduction of trucks in the 1940s made available portions of the Depot, which until then could not be used for the siting of storehouses because they were remote, on higher ground or available for development.

#### Receipt Into The Depot

During the early decades of the Depot's operation all stock was brought in by water to the wharf on the Parramatta River. The type of vessels first used for this purpose is unclear, although concrete lighters were used for most of the 20<sup>th</sup> century. Water borne access also emphasised the fact that the majority of naval armament was either imported from the UK, or,



until the middle of the 20<sup>th</sup> century, manufactured in Melbourne and transported to Sydney by ship. It was only after the armament manufacturing facility at St Mary's was established that some stock was transported by road. However, large quantities of stock were still imported, and transported directly up river from the Port of Sydney.

By the 1990s, most Australian made stock arrived by road and was transferred onto either the rail system or forklift for movement into workshop or storehouse. Material that was transferred by water was done so in special concrete lighters. They were designed with relatively weak bottoms to send the bulk of any explosive force downwards into the water.

### **Movement Around The Depot**

The earliest depot use contained all explosives storage in what is now known as Building 20. All the workshop and quality control processes were housed in buildings located within a small secure precinct, which was defined by a tall iron picket fence. The latter has now been demolished above the line of its concrete footings. The explosives buildings were close to and approximately on the same level as the wharf. It was from here that the majority of supplies were received and despatched from the Depot. Prior to the introduction of the light rail system in 1909 it is uncertain how stock was moved about the site. Horse and cart or hand pushed trolleys are the most likely means, based on the few surviving documentary references.

Once the 2-foot gauge, light rail system was introduced heavy stock could be moved longer distances and greater quantities could be transported in the course of a working day. The rail system was soon extended to what is now Building 28 close to what was then the southern boundary of the Depot. Hand pushed trolleys on light steel rails were taken into the magazine. Here the rails changed to brass strips over timber rails to prevent sparks. One or two of the early trolleys are thought to have survived relatively intact and were stored in Building 20.

Until World War II the design of magazines and explosives storehouses continued to take into account the means by which stock transported by rail was transferred into the building. This was achieved by directly taking the light rail system into the body of the store, or by running the rail close by the main entry or a series of side entrances. The light rail was often laid through narrow cuttings or low tunnels in order to maximise the use of flat contours. In more recent years this has created problems as the low access ways into many of the storehouses created by this system made entry difficult for forklifts.

### **Lifting And Storage**

Originally shells and propellant cases were delivered and stored as individual items, a system that continued until well after World War II. A long tradition of materials handling, based on these packaging arrangements, developed from the early days of the Depot and persisted well into the later decades of this century. It was known as the "Armstrong" technique, since it relied on human effort, with a mixture of bravado and pride, to lift the heavy items. Changes to packaging and the weight of most items resulted in changes in handling techniques. Stock was then delivered packaged in multiple units, often on pallets, and weighing far more than

can be carried or lifted by hand. Electric powered forklifts were then used in most storehouses.

Ammunition and other explosive stock were always stored by explosives classification. Stock of different categories was virtually never stored in the same building.

Gantry cranes are a common feature of both storehouses and workshops. They often extend out of the building and over the adjacent railway or road. Several of the larger 1930s and 1940s storehouses and most of the concrete storehouses at the southern end of the site were also fitted with internal overhead travelling cranes of varying capacity. These moved stock from the rail system or trucks to the required storage location. Modern workshops, established by refitting Buildings 18 and 33, were equipped with sophisticated mechanical arms and other lifting equipment.

Changes in the equipment used to lift and store stock initiated differences and alterations in the design of storage buildings. By the 1930s most of the new brick explosives storehouses were erected with raised floor levels and a loading platform adjacent to the light rail connection. This allowed stock to be lifted directly from trolleys by gantry and shifted into the store. With the general introduction of trucks during the Second World War, the floor level of many storehouses were set at tray height for ease of transfer, although the US Armco style storehouses, which were also accessed by truck, were designed with floors at roadway level.

There is still a ramp near Building 28, which was used to transfer goods from the rail trolleys to trucks. A nearby crane was used for the same function. From the 1890s cranes have been used at the wharf to assist in the transfer of stock from lighters. It had not been possible to identify the type of cranes used in the early decades. The cranes had been modified or replaced as changes have been made to the quantities, scale and packaging of stock.

In the war years, because of the increased operational levels of the Depot two cranes were mounted on the wharf. The current large crane was moved from Garden Island Dockyard.



**Figure 3.21.** Rail network on the wharf with trolley.  
Schwager Brooks and Partners 1996



**Figure 3.22.** Electromobile and trolleys in cutting, 1950s  
Schwager Brooks and Partners 1996



**Figure 3.23.** One of the original trolleys showing how it was pushed by hand into the original magazine (20) Schwager Brooks and Partners, 1996



**Figure 3.24.** Cranes, lighters and rail transport on the wharf, 1950s  
Schwager Brooks and Partners 1996





**Figure 3.25.** Modern crane on wharf is a major visual feature on the river  
Schwager Brooks and Partners 1996

### **Prevention of Sparking**

The principal development in industrial technology evident at Newington was the change from the handling of dusty, unstable explosives, such as gunpowder, to pre-packaged and more stable explosives. This fundamental change in the nature of explosives created less need for special protective clothing. However, the avoidance of sparks produced by static electricity, naked flames and induced electrical current remained as a critical requirement. For this reason all the explosive workshops, magazines and storehouses have extensive earthing protection in the form of lightning conductors at roof level, copper strips running around the exterior to avoid lightning strike and earthing connections on all window and door sashes. Some buildings even have earthing connections between individual sections of ferrous ridge capping. Floors were usually laid with non-spark generating material, such as malthoid. In the storehouses, where floor loadings are high, the material is generally laid between a grid of timber battens.

Internally, the Explosives Workshops are fitted with copper strips around the walls of working spaces, copper topped workbenches and special earthing plates located near entry doors for staff to touch when they enter the space. All hand tools and many work benches are covered in non-ferrous sheeting.

Operational rules required all staff working in the magazines and explosives workshops to change their footwear at the entrance. This procedure was to minimise the risk of sparking from the contents of pockets, grit or static electricity, in addition to being a general security

measure. To ensure ease of supervision the toes of approved work boots were painted red or yellow to easily distinguish them from normal footwear.



**Figure 3.26.** All external elements of workshops and storehouses are fitted with earthing conductors. Schwager Brooks and Partners, 1996



**Figure 3.27.** Benches and equipment in workshops are securely earthed  
Schwager Brooks and Partners, 1996

### **Quality Control and Repair**

Ensuring the quality of the stock and undertaking minor repairs or related works was carried out in the explosives workshop. The work involved mechanical gauging, measuring, electrical testing and pressure testing of containers. Stock samples were taken apart, inspected and reassembled, gauged and occasionally repainted. The more sophisticated testing of precision-guided weapons systems took place at Kingswood. Newington handled only conventional material.

Traditionally the explosives workshops were very small, capable of accommodating only two or three staff who worked on strictly limited quantities of material. This arrangement limited the potential danger to staff and to the Depot, by restricting the size of a potential explosion.

Individual workshops were arranged in small groups and were separated by protective concrete blast walls or earth traverses. As an added safety precaution, it was common practise to only use every second workshop at one time. Only the required amount of explosive material or item of ammunition was delivered to the particular workshop and the completed work was removed before the next item was delivered to it. This strict set of procedures and demarcation of duties limited the amount of work that could be achieved during a typical working day.

Most of the smaller workshops had been closed by 1996, either because they were within the safety arcs of other operations such as the wharf, or because the safety requirements generated by their own operation was too restrictive on other Depot activities in the vicinity.

The procedures then in use and more stable explosive material had resulted in an extensive change to the workshop operations and internal layout. Two larger buildings, Nos 18 and 33, had been converted for this purpose. The essential process of checking, testing, minor repairs and maintenance continued, but the working arrangements were more cooperative, interchangeable and productive and are carried out by multi-skilled teams.

### **Administration**

The operations of the Depot depended on administrative support. Newington had an Officer in Charge (OIC) who was supported by four section managers; Administration, Warehouse, Production Control and Quality Control. The OIC ensured that the operations of the Depot were conducted in accordance with current licensing requirements. These were renewed on a periodic basis, about every two years or whenever a significant change takes place. The Depot was inspected by an independent officer to ensure the maintenance of standards and regulations. New licences were issued or corrective actions taken on the basis of those inspections.

The Administration Manager was responsible for maintenance of the facility and its grounds, security, personnel and expenditure, in addition to the normal range of administrative matters.

The Warehouse Manager was responsible for stock control and general services. Modern explosives ordnance can be stored for up to 30 years and sufficient stock was held to maintain a level of readiness for the armed services. Enough stock was therefore held to allow for a

slow build up in new production or supply in times of perceived defensive threat, particularly if the stock was to be imported.

The Production Control Manager administered the Explosives Workshops and Production and Documentation Control operations. This included the Library and Technical Drawing collection. The documentation required for every movement of stock into or from the Depot was prepared and packaged by this section.

The Quality Control Manager ensured that all the operations of the Depot were conducted in accordance with agreed quality control procedures.

When Spectacle Island was in full operation, Newington was operated as a sub-depot. The OIC was based at Spectacle. Newington became the main Depot after the administrative arrangements at Spectacle were relocated there some decades ago. Originally both Newington and Spectacle Island were managed as a relatively self-contained operation specialising in Armaments supply. In more recent years, Newington was amalgamated with the overall Naval Logistics operation. Several of the former staff members claimed that, as a result, the sense of identity and pride in specialised work skills was diminished.

### **Security and Safety**

Fences, gate control and Naval Police patrols maintained security of the overall precinct. All buildings were locked and strict control was kept on the issue and handling of keys.

Fire precautions and the general safety and security requirements of an operational defence facility were impressed on all who work or visit the Depot.

Safety was maintained within the licensing standards of Depot operational regulations. Unskilled staff operated under close supervision where necessary. Signage described the explosives classification of the material stored in a particular storehouse and the type of fire fighting measures and protective clothing required in an emergency.

Safety was always an important aspect of the working conditions at Newington. During its long period of service only two fatalities are known to have occurred, in an accident in one of the explosives workshops, in 1975.

### **3.7.3 The Evidence**

#### **Water Access**

A wharf near the junction of the Parramatta River was one of the first structures constructed for the newly established Depot in the 1890s. While the original wharf has long since been upgraded and expanded, probably on several occasions, there may be some remnants of the original structure below the existing facility.

The current timber wharfage extends along a sizable length of the waterfrontage. It contains a large crane and a complex of rail lines sufficient to manoeuvre a large number of trolleys.



There are a number of storage, administration, amenity and security buildings located in the vicinity of the wharf.

Stock was transported by concrete lighters, which were towed down the Harbour by tug.

### **Road Access**

While the main access to the Depot in terms of stock movement has always been by water, the Depot was accessible by road from the earliest period. Until the first half of the 20th century road access was relatively difficult and the Depot staff were conscious of the sense of isolation from nearby Auburn. This sense of isolation was one reason why those living on the base developed a sense of community.

The road network within the Depot expanded in accordance with the available land and the location of the various storehouses and other facilities. The original entry from Jamieson Street remained as the primary land entry point until the Second World War expansion to the south when the “Auburn Gate” was opened. This and the buildings associated with the entry were demolished when the Expressway was constructed.

Access to the vicinity of the Depot from the south was available by 1915 when the adjacent State Abattoir utilised most of the ground not taken up by the military. This road alignment was consolidated in the Second World War, when it became known as the “Burma Road”, and linked the Depot to the former Homebush Brickworks, which were taken over for additional storage purposes. This particular area was operated as the Homebush Sub-depot due to its remote distance. It utilised the existing wharves in Homebush Bay.

Prior to the Olympic Games related development, there are two other road layouts in the Depot that are commonly described on the basis of their shape in plan, the “Bullring” and the “Banana”. Both relate to the road access provided to the US Navy explosives storehouses during the Second World War. Together with the road that links the concrete block style storehouses across the southern areas of the Depot, these two roadways most clearly illustrated the extensive development of the Depot that became possible once trucks were introduced as the major form of transportation. The “Banana” and most of its associated US Navy underground bunker style storehouses remain.

This change was consolidated in the post war years, particularly as the transportation of stock to and from the Kingswood Depot increased. There were a number of instances throughout the Depot where loading ramps were introduced to facilitate the transfer of stock from road transport to rail for final delivery into those storehouses where the limited access ways of the rail tunnels or cuttings prevent close access by motor vehicle. In general the road network is now closely integrated with the wharf and the larger Depot. This allows the achievement of greater efficiencies as relevant stock can be transferred directly from vessels on the river to trucks where access by rail is no longer required.

### **The Light Rail System**

A light rail system was first introduced to the site in 1909, replacing an earlier system of manually hauling the stock or using horse drawn drays. Comprising a 2-foot gauge and

eventually running electric powered locomotives, the light rail system is not the oldest in NSW but it may well be the largest system, particularly in an industrial/warehouse style installation that is still largely in full working order. Within the Depot it defined the layout of the place with its requirement to maintain flat or very low gradients and it unifies by linking the diverse sections of the facility. The use of brass strips over timber rails in the magazines, to prevent sparking, is a feature that is rarely found elsewhere. There are two of the original hand pushed trolleys remaining on the Depot.

The rail system was partly laid on sleepers and partly built into a concrete base with narrow drainage slots for the rails. The reasons for this difference have not been revealed, except that in some sections, timber sleepers and new rails were laid directly over the earlier concrete embedded tracks, when these had deteriorated due to poor drainage along the cuttings.

Light rail systems were a common feature of construction sites, mines and manufacturing plants throughout the late 19<sup>th</sup> and well into the 20<sup>th</sup> centuries. The earliest light rail system in NSW is thought to have been in c1830, used by the AA Company in the Hunter Valley. The earliest in Sydney was used in 1836 for the construction of Circular Quay.

By the later decades of the 19<sup>th</sup> century there were light rail systems at Eastwood Quarry (1854), Prospect Gravel Quarry (1870), Millers Point Coke Works (1876), Mosman Bay (1878), Emu Plains (1885), AGL Mortlake (1886) and Chowder Bay (1893).

Battery powered locos were first introduced by the Public Works Department in 1922 and by 1925 five were being used for the construction of pressure tunnels of the North Shore Ocean Outfall by the Water Board. In 1946 there were 14 in use in Sydney and over 60 until recently.

Many of the large military manufacturing and warehousing installations were fitted with such rail systems, although most have been removed from their sites. At Spectacle Island, hand trolleys operating on a full gauge railway system remain as an interpretative facility.

It is apparent, from maintenance works carried out to the light rail system in the early months of 2001 that alterations were made from time to time during the operational life of the Depot. This is most notable in that section of the line leading south from the main central junction. In this section the original concrete framed sections of track had deteriorated as a result of poor drainage and slippage from the cutting embankments. Rather than conduct extensive repairs, the Depot managers chose to simply lay an additional set of sleepers and rails over the original line and fill the space with ballast. This form of repair was to have long term consequences as the new rails tended to slip out of alignment and the underlying problems of drainage and earth slippage continued.

### **Magazine Storage Design Principles**

The principal service provided by the Newington Armament Depot was storage. For this reason magazines and explosive storehouses are the most numerous buildings on the site. The individual construction and subsequent addition of several buildings designed for this purpose means that several methods devoted to the storage and handling of explosives during

the late 19<sup>th</sup> and first half of the 20<sup>th</sup> centuries are demonstrated on this site, a rare physical expression of this evolution in philosophy and practice.

A distinction is made between the terms “Magazine” and “Explosives Storehouse”. “Magazines” were used for the storage of dusty explosives, such as gunpowder, where there was a high risk of accidental explosion from sparking. “Explosives Storehouses” were used to store material that came in a variety of packages, including cordite canisters, flares, torpedoes, aerial bombs and high explosive shells.

The primary design requirement for both magazines and storehouses was to ensure the safety and continuity of the contents. This was achieved by erecting enclosures that were sufficiently secure to withstand several potential threats. The risks included enemy artillery fire in a defensive fortification, theft, lightning strike, vandalism and fire or sparks on an isolated mining or engineering site. Damage could also arise from flying debris on a site where there were a number of magazines in close proximity. Containment of an explosion at first does not appear to have been normal design criteria.

The power of munitions explosions and the relative ignorance of their causes predicated such precautions. It was only after extensive testing of captured German munitions following the First World War that any real progress was made in understanding these processes. From those experiments, additional criteria were identified and these included weather protection and the provision of a relatively stable temperature or moisture conditions to ensure the longevity of the stock in premium condition.

The need for containment and safety measures derived directly from the changing nature of artillery. Explosive shells, for example, were invented in 1784, by Henry Shrapnel. By 1815, William Congreve had developed rockets that could carry both shrapnel and incendiary rounds. The conventional rifle was produced in 1854. Separate cartridges were developed in 1878. The end of the 19<sup>th</sup> century was marked by the invention of greater numbers of explosive shells, torpedoes and other similar devices.

Much of the theory of magazine design utilised in the British Empire throughout the 19<sup>th</sup> century was developed by the leading French military engineer, Vauban, in the late 18<sup>th</sup> century. The principal magazine on Goat Island, built in the 1830s for example, is a direct application of Vauban’s principles. So too, was the first magazine (Building 20) built at Newington in the 1890s.

Two of Vauban’s primary design criteria for gunpowder magazines in defensive fortifications were a secure location and construction solid enough to resist the fall and bursting of shells. Vauban’s ideal magazine was 60ft long by 25ft wide. The stonewalls were to be 8 ft thick, terminating in an arched roof 3 ft thick at the thinnest point, strengthened by four counter-ports or buttresses. The end walls were to be 4 ft thick with a door and window in one end and a window in the other.

The door and windows would be lined with copper. The floor was to be raised on small piers to allow drainage away from the stored powder. Ventilation was effected by a series of small dogleg passages along the sidewalls. A solid section of masonry was left in the centre to prevent the transmission of sparks, fire or shot through the vents.

Barrels were to be stored in tiers usually up to three levels in height. The ideal powder magazine would hold 1050 barrels of powder. For further security, the whole building would ideally be surrounded by a protective wall, located about 12 ft from the magazine walls and approximately 10 or 11 feet in height. It was more usual to construct magazines smaller than this ideal size so that the required depth of masonry walls could be reduced. To increase storage capacity at a particular installation a series of adjacent vaulted chambers, of the reduced size, would be erected.

### **Magazine Design in Practice In Sydney**

The storage of gunpowder was of major concern to the settlement of Sydney during the early 19<sup>th</sup> century. Storage of both civilian and military stock was often unsafe in inadequate warehouses and hulks moored in the Harbour. The construction of the Queens Magazine on Goat Island in 1839 was the first attempt to regularise the situation.

The design of this building was based on the established Vauban model. It varied only in the size, being 100 feet by 25 feet. The choice of the western slopes of Goat Island afforded protection for the magazine from the flat trajectory of cannon fire should hostile ships enter the Harbour and minimised the potential for damage to the township in the event of an explosion. The magazine was constructed of massive sandstone blocks up to 2m thick with a barrel-vaulted roof clad with Bangor slate supported on a timber frame. Ventilation and the entry of sparks were controlled by offsetting the inside and outside outlets of the vents, although not exactly along the Vauban model. The magazine was protected by a large excavated cliff and an encircling wall of heavy sandstone. Fire safety was achieved largely by clearing the island of its vegetation cover. Other facilities such as barracks and meal rooms were located outside the walled section, to reduce the risk of damage from explosion.

The second and later Colonial Magazine built at Goat Island in the 1850s, to a design by the Colonial Architect did not conform to the accepted standards of the Vauban model in aspects of plan and materials. Due probably to cost, speed of construction and Blakett's lack of understanding of the accepted magazine design, later additions to the Colonial Magazine, repeated these variations. In addition the new works were sited close to the Queens Magazine and laboratory, contrary to the traditional practice of isolation.

The second major military magazine complex to be built in Sydney was at Spectacle Island. Its location was chosen for its isolation and, therefore, it posed less risk to the city and its suburban population in the event of an explosion, than Goat Island. Spectacle magazine was constructed in 1865 and was similar to the Colonial Magazine at Goat Island in general form and construction, and did not conform to Vauban's model. It was designed by the Colonial Architect.

Changes were made to the magazine after construction to create a more even temperature for the storage of gunpowder. As well additional wings were built on each side and these were connected internally along the principles established by Vauban.



**Figure 3.28.** Queens Magazine, Goat Island (1837)  
Schwager Brooks and Partners 1996



**Figure 3.29.** Spectacle Island Magazine, (1865)  
Schwager Brooks and Partners 1996

Apart from these three principal magazines (as well as lesser ones in places such as Fort Macquarie and Garden Island) and the construction of Newington in the 1890s, Sydney's last principal magazine was built at Bantry Bay, north of the city in an isolated arm of the Harbour.

At Bantry Bay the main construction period was between 1909 and 1915 and illustrated a new phase in the design philosophy of gunpowder magazines. The individual magazines were set into cuttings in the steep hillside.

The magazines were constructed of brick with lightweight steel framed roofs supported on external brackets, designed to blow off and direct the blast upwards. The doors are made of steel plate, the windows have external steel plate shutters and a system of double-glazing to reduce heat penetration and the chance of sparks entering the building.

Temperature control was achieved by both passive and active methods. A storage dam, located above the magazines, supplied water via a system of pipes and valves which could run over the roof to reduce the heat load during very hot weather. The large eave overhangs also minimised heat gain to the brick walls.

Apart from their construction details the magazines are smaller than those at Newington, possibly to minimise loss in the event of an explosion. They are connected by a light rail system similar to that in use at Newington.



**Figure 3.30.** One of the Bantry Bay explosives magazines (1915)  
Schwager Brooks and Partners 1996



### Magazine Construction at Newington

The original magazine at Newington (Building No. 20) dates from 1897 and was designed primarily to accommodate gunpowder stored in barrels. The siting at Newington was consistent with the established principles of isolation. The magazine was located away from the wharf and some distance from the laboratory and workshop buildings. Associated residences, offices and stores were set well away from any risk to damage. Movement of stock was by a light rail system of hand pushed trolleys, later electrified. The magazine was cut into the hillside and designed along Vauban's established principles but utilised brick walls and vaulted ceilings to protect the contents. The roof is clad with slate to reduce combustibility. The storage chambers consist of three barrel vaulted spaces separated by narrow vaulted passages that have small windows to accommodate lanterns for lighting the main chambers, an innovative feature for the time. The magazine was later fitted with a heavy buttressed brick retaining wall and earth traverses to three sides, possibly to afford greater protection to adjacent buildings and facilities.

Three small brick buildings with slate roofs (36, 37 and 38) were erected in the early years of Navy occupancy in the 1920s. They emulate the design and siting concepts used at Bantry Bay but with simpler roof construction. They were placed close to each other, cut into the hillside and all face out over the isolated marshland. Located in a remote part of the Depot they were connected to the wharf by an extension of the light rail system.

These buildings are notable for the small, enclosed entry porch, which provided a place for workers to change into regulation clothing. A similar device was used at Bantry Bay. It was to be a work practice and a design feature that remained consistent for all future magazines and storehouses erected at Newington, with the exception of those erected by and for the US Navy.



**Figure 3.31** Pre-war small explosives storehouses round woodland. (36, 37, 38).

### Pre-war Explosives Storehouses

Explosives Storehouses were designed specifically to accommodate non-powder explosives. A number of these buildings were erected at Newington in the 1920s and 1930s. They all tended to be larger than the small pre-war magazines and usually responded to the specific needs of particular purchase programmes by the Royal Australian Navy.

Building No. 33 was designed in the late 1920s but was not built until the later 1930s. It was purpose constructed to store aerial bombs used by the seaplane on the newly acquired HMAS ALBATROSS. It is similar to Building No. 39 in design, having a concrete roof, brick walls and roller shutter doors and windows. Building No. 39 is an explosives storehouse, which was built to store depth charges and was later used to store warheads. It is a medium sized storehouse constructed of brickwork with engaged piers. It is roofed by a concrete slab. There is a roller door at the entry and several windows. This is one of the few storehouses constructed in this period without earth traverses. It was made possible by its extreme isolation in relation to other storehouses and magazines.

Building No. 18 is a large storehouse, which has brick walls and a concrete roof. The building is free standing on open country near the river frontage but is completely surrounded by a high earth traverse. It has a number of entry porches down its long side due to its unusual length. Each entry has access to the light rail system.

Buildings Nos. 7, 8 and 21 are similar in design to Building No. 18 although Nos. 7 and 21 are much smaller. All these storehouses are cut partially into the hillside and protected by earth traverses.



**Figure 3.32.** RAN pre-WWII explosives storehouse (33)





**Figure 3.33.** Large RAN Explosives Storehouse (18) protected by earth traverse  
Schwager Brooks and Partners 1996

### Early World War II Storehouses

The large brick storehouses comprising Building Nos. 42-45 are of brick construction, which provided stable temperature, necessary for the storage of cordite. The lightweight roof structure, truss supported corrugated asbestos cement roof cladding which contrasts with the concrete roof slabs of other storehouses, was designed to fragment in case of an explosion.

These storehouses are located in a group to the south of the forest and are generally cut well into the side of the hill. Earth traversing completes their enclosed perimeters. They were used to store cordite, which required greater temperature control than the shells held in Building Nos.46 –49.

Building Nos.46-49 are large storehouses, which are constructed of timber-framed corrugated asbestos walls and roof cladding. This construction style ensures that the entire building disintegrates in the event of an explosion. This poses a reduced threat to nearby structures from debris, a concept termed “frangible design”. Each is cut into the hillside and encircled by a high earth traverse. The light rail system cuts through the traverse and travels into each storehouse for the entire length of the building, and unusual feature for the storehouses.

The choice of building materials may also reflect restricted defence budgets, although corrugated asbestos was a popular external cladding material for defence facilities before and during the war.

### **World War II US Navy Explosives Storehouses**

The storehouses constructed by the US navy comprise two types: steel ARMCO igloo earth-covered and a modified ARMCO design which was earth-covered, and a third earth-covered concrete arch style. Many were removed from the overall Newington site as part of the Olympics related development.

Building Nos. 52, 53, 54, 60, 61, 77, 78 and 79 comprised the steel ARMCO igloo earth-covered type. These structures were built by the US Navy wartime construction troops, the “Seabees”. Most are located in the sunken roadway system known as the “Banana” and all are earth-covered.

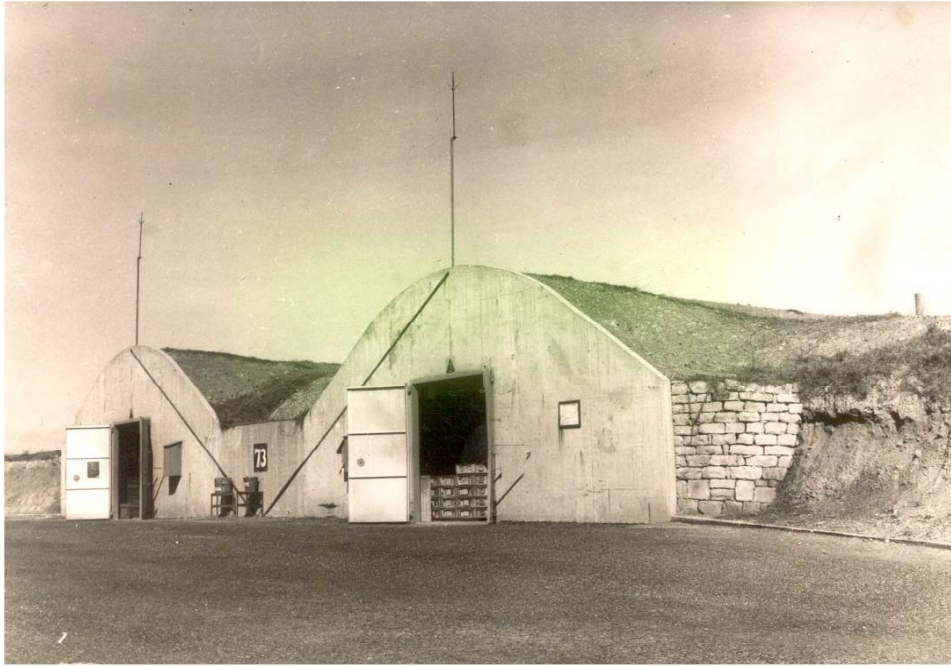
The storehouses are relatively small and comprised of prefabricated steel components, which can be easily transported and assembled in remote locations. Steel plated facades are bolted together and storage areas are formed from curved corrugated steel sections, which are also bolted together. While the earth-cover provided some containment of any blast, it was anticipated that any blast would be directed out through the front wall. The long axis of each storehouse was directed away from the other.

Building Nos. 62 and 75 were of the earlier ARMCO design, although they have been modified after their construction. No. 62 had a concrete façade constructed in 1982, which replaced the original rusted steel plate façade. No. 75 has been converted for use as a firing range to test different guns and weapons after refurbishment. The modifications consisted of a brick façade added to the storage chamber with a small brick preparation room connected by a narrow tunnel.

Building Nos. 56, 57, 58, 59, 66, 67, 68, 69, 70, 71, 72 and 74 were both double and single concrete arch earth-covered storehouses. The single type had a long storage room twice the length of the double type, which was joined by the common concrete arched façade, giving a similar storage capacity, but easier access.

They were similar in design to the US ARMCO model but were built by Australian civilian construction contractors, although operated by the same US Navy personnel who used the steel ARMCO types. They are generally located within the sunken road system known as the “BULLRING”.

The facades of these earth-covered storehouses were constructed of reinforced concrete vaults. Similar material was used for the facades.



**Figure 3.34** US Navy storehouses under earth berms (73) now demolished, 1950s  
Schwager Brooks and Partners 1996

### **WWII Australian Designed Explosives Storehouses**

Concrete box earth-covered (single and double) storehouses were the underground buildings, which were built by Australian construction personnel during the later years of World War II. Some were possibly constructed in the immediate post war years. These buildings illustrated the later design philosophy and technology in the construction of explosives storehouses. The storehouses were generally located on the road that crossed the southern area of the Depot linking it with the “Auburn” gate. Two others were placed on the “Bullring”. All but one of these Storehouses were demolished as part of the Olympics related development.

These storehouses were used to store armaments for both the Royal Navy and the Royal Australian Navy during the later phases of the war. The Australian personnel at the Depot operated them.

Building Nos. 64, 65, 85, 86, 87, 88, 94 and 95 were single storage magazines while Nos. 89, 90, 91 and 93 were double storage magazines. Each section of the double storehouses was identical internally to the single buildings. The two halves were linked by a common façade. Each structure was built with concrete walls, roof and floor. They were earth-covered with a concrete façade. The roof was slightly gabled along the axis of the chamber and extended outwards past the façade to form a cantilevered portico for loading. The main loading doors were constructed of steel plate and accommodate a gantry rail system for handling heavy objects.

The majority of the entrances were elevated to provide loading platforms for trucks. Some were set at ground level to allow access for handcarts. A separate entrance door was provided for workers into a small recessed entrance vestibule, which acted as a transition zone. The personnel door was constructed of sheet pressed metal on a timber core. Benches and cupboards for changing and storing clothes were found in the transition zone.

Windows were placed at high level and were covered with shutters constructed of steel plates. These could be opened to allow daylight and fresh air inside. These buildings were designed to direct the blast out through the windows and doors and away from other structures. These storehouses were all located along curving roads that are set down into the ground line to further contain the force of any blast.

Two other explosive storehouses of frangible design were constructed with timber frames, weatherboard cladding and asbestos cement roofs. These were Building Nos. 97 and 99. They were sited high on the southern ridge of the expanded Depot area and did not have earth traverses encircling them. There were no other significant structures in this area of the site, presumably, therefore, a blast was considered to be sufficiently isolated in an area of less risk.



**Figure 3.35.** Former single concrete box style underground explosives storehouse (85) now demolished. Schwager Brooks and Partners, 1996

### **Moveable Items**

In addition to the fixed structures and site infrastructure, there is a variety of moveable items or portable relics that support the operation of the Depot. These can be grouped as follows:

- Items associated with the light rail system, including the two original trolleys, contemporary trolleys, the electro-mobiles, pallets and other forms of containers for transporting stock around the Depot. There is a workshop complex for the electro-mobiles, containing a variety of equipment and tools used to maintain the system.
- Electrically operated forklifts, which are used to transport stock and other equipment within particular buildings or to assist with the loading and unloading of stock onto trucks or rail trolleys.
- All ammunition and explosives material is delivered to the Depot, stored and eventually transported to and from ships in specially designed containers or packages. Some of these containers become surplus and are stored at the Depot until disposed of.
- The concrete lighters and tugs used to transport the stock down the Harbour, to and from the ships, are an integral component of the Depot operation.
- The Laboratories or Explosives Workrooms are fitted with a variety of specialised tools and equipment, related to the processes of testing and repairing stock. This equipment is largely unique to armament depots, because of the dangerous nature of the stock and the handling processes.
- The workshops, garages and sheds contain a wide collection of purpose made equipment related to the general support operations of a large industrial enterprise.
- At any time the Depot stores hundreds, if not thousands, of items of armament.
- There is a complete system of security and fire fighting equipment within the Depot.
- The normal operations of the Depot produce a wide range of documentation and records with regard to licensing, stock control, administration, personnel, receipt and despatch of stock, quality control and maintenance. Some early photographs of the Depot are included in this collection.
- There is a collection of mid 20<sup>th</sup> century furniture in the administration areas.

## 4.0 Site Precincts

### 4.1 Definition of Precincts

For historic description, the site has been divided into four precincts to allow for closer analysis of the relationship of historical development, built elements and landscape (see **Figure 4.1**).

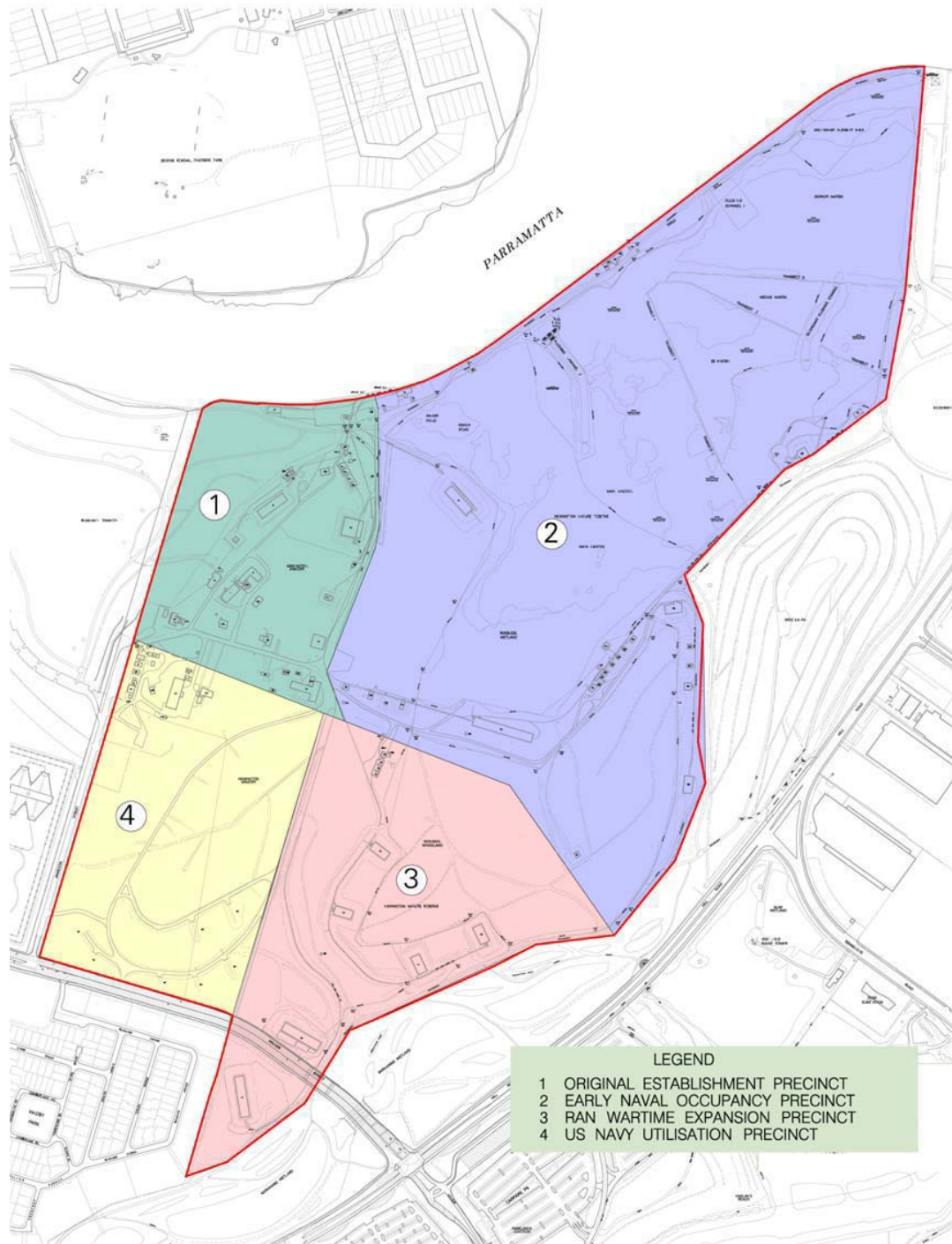
The precincts principally relate to historical periods of development but also reflect changing processes of explosives storage and handling and the integration of these developments into different landscape elements. The name of each precinct has been taken from SBP, although the boundary of each precinct has been changed to reflect the development of the site since 1996. Although the names of the historic precincts relate only to the period of occupation of the Armament Depot, the precincts reflect general divisions from earlier periods of occupation as well.

The historic precincts are:

- Original Establishment Precinct;
- Early Naval Occupancy Precinct;
- RAN Wartime Expansion Precinct; and
- US Navy Utilisation Precinct.

It should be noted that precincts 3 and 4 represent the surviving components of the larger precincts of the same name that were established in the 1996 SBP Heritage Assessment. The following figure details the historic precincts as they are at the time of writing this CMP.





**Figure 4.1.** Historic Precincts of MPPH

## 4.2 Definition of Interpretive Themes

To further enhance analysis of the site and to draw relationships between buildings, structures and landscape, a number of interpretive historic themes have been identified. The interpretive themes have been developed from the historic themes identified for MPHP in the thematic history. Each structure and built element has been assigned an interpretive theme in order to provide an interpretive linkage between elements and provide another layer to the historic analysis. In using the themes, the patterning of elements in each precinct can be seen more clearly and the layered historical relationship between elements explored.

The interpretive themes provide a close relationship between the thematic history of the site, built elements and landscape.

Given the long history of the site prior to the occupation of the land for Defence purposes, and the important cultural landscapes which the MPHP preserves, the themes have been expanded from the 1996 *Heritage Assessment*, which only dealt with the Armament Depot period. However as all building and infrastructure elements are from the period of Defence, these predominate in the site analysis. In the following text the Building and feature number are identified in brackets.

The interpretive historic themes are:

1. First Australians
2. The Changing Environment
3. Defence
  - 3.1. Depot Administration
  - 3.2. Staff Facilities
  - 3.3. Armament Storage
  - 3.4. Inspection & Testing
  - 3.5. Transportation Infrastructure

Each built element and structure in each precinct, with its primary interpretive theme, is identified in the following **Tables** (see Tables 1, 2, 3 & 4 further below).

**Table 1. List of buildings, features and items in Original Establishment Precinct.**

Number	Name and date of construction	Interpretive Theme
1	Dockyard Police Office 1928	Depot Administration
2	Timekeepers Office c.1940	Depot Administration
3	Garage and fire store c.1940s	Depot Administration
4	Canteen 1944	Staff Facilities
5	Change room/toilets 1926	Staff Facilities
6	Office c.1926	Depot Administration
7	Explosives Storehouse pre.1937	Armament Storage
8	Explosives Storehouse 1940	Armament Storage
12	Wharf Transport Office c.1930s-40s	Depot Administration
13	Store 1937/1944	Inspection & Testing
15	Return Store 1937	Armament Storage
19	Riggers store c.1930s-40s	Armament Storage
20	Original Gunpowder Magazine c.1897	Armament Storage
21	Brick Explosives Storehouse pre.1937	Armament Storage
22	Non-Explosives Store c.1922	Armament Storage
24	Smoke Float Store pre 1922	Armament Storage
25	Stencil Cutting and Tool room c. 1940s	Inspection & Testing
26	Stables 1926	Depot Administration
83	Sailmakers store c.1940s	Depot Administration
105	Training Centre 1944	Depot Administration
116	Time Clock Race 1970	Depot Administration
117	Toilet/Ablution block 1939	Staff Facilities
118	Residence 1897	Staff Facilities
121	Electrical substation	Depot Administration
123	Residence 1897	Staff Facilities
126	Residence c.1897	Staff Facilities
137	Toilet block/Store	Staff Facilities
138	Storemans Office c.1939	Depot Administration
139	Residence c.1897	Staff Facilities
140	Explosives Workroom 1897	Inspection & Testing

Number	Name and date of construction	Interpretive Theme
141	Explosives Workroom 1940	Inspection & Testing
142	Explosives packing room c.1897	Inspection & Testing
143	Gatehouse 1897	Inspection & Testing
144	Explosives workroom c.1940s	Inspection & Testing
145	Explosives workroom c.1943	Inspection & Testing
146	Explosives workroom pre.1939	Inspection & Testing
147	Compressor room c.1939	Depot Administration
148	Toilet block 1897	Staff Facilities
149	Naval Police Office	Depot Administration
150	Electromobile garage c.1940s	Transportation Infrastructure
151	Electromobile workshop c.1940s	Transportation Infrastructure
152	Transformer room c.1940s	Depot Administration
198	Flammable Liquids store 1963	Armament Storage
200	Toilet block c.1897	Staff Facilities
235	Light Railway 1897-1909	Transportation Infrastructure
236	Wharf c.1895	Transportation Infrastructure
237	Burma Road pre.1937	Transportation Infrastructure
241	Camphor laurel avenue and gateposts c1897	Transportation Infrastructure
242	Footings of original fence line c.1897	Depot Administration
247	Cranes on wharf c. 1973	Transportation Infrastructure

## 4.3 Original Establishment Precinct

### 4.3.1 Description of the Precinct

This precinct is situated in the northwest corner of MPHP (see **Figure 4.2**). It reflects the extent of the original Armament Depot establishment of 1897, but not the full extent of the early military reserve. This precinct contains several Federation period armaments buildings, which were the first to be constructed for military purposes. A number of Interwar and later amenity buildings and supporting structures, as well as the wharf, the gatehouse and part of the light rail system are also located within this precinct. Prior to the military occupation of the site this portion was part of the first three small land grants prior to Blaxland's Newington Estate. The precinct contains areas of cleared grassland, ornamental plantings, reclaimed land and Parramatta riverfront.

This precinct contains within it, structures, infrastructure and other elements, which document the establishment and development of the Armament Depot from 1897 to the early decades of the 20<sup>th</sup> century. The landscape within the precinct reflects the three major interpretive themes of the site; *First Australians*, *The Changing Environment*, and *Defence*. The bulk of the structures and some landscape elements reflect the five sub themes; Depot Administration, Staff Facilities, Armament Storage, Inspection & Testing and Transportation Infrastructure.



**Figure 4.2.** MPHP Original Establishment Precinct



#### 4.3.2 Analysis of the Original Establishment Precinct

This precinct contains within it an historical association with part of the first land grants made in this area between 1797 and 1800. The river frontage holds the key to the early granting of this area, as with the later Defence establishment, the river provided transport and access. Altering the flow of water over the site and reclaiming land on the river's edge probably began soon after settlement and has continued to this day. The northwest corner of this precinct was originally marshland, which was cleared and drained during the establishment of the first powder magazines. This area had retained some wetland character until recent works associated with Parklands saw more levelling and clearing of the area. This small section therefore provides interpretive linkage between the closely associated themes of *First Australians* and *The Changing Environment*. It also serves to demonstrate the long and continuing history of environmental change and development on the site.

The original Gunpowder Magazine facility built in 1897 consisted of a magazine (20), a workroom (140), a toilet block (148), a packing room (142), three residences (118, 126, 123, 139) and a gatehouse (143). The facility faced the river, while three of the residences were placed close to the road entry at Jamieson St. The facility was placed close to the wharf and was built in an area which had been cleared and partially reclaimed by the earlier pastoral settlers. The original magazine was surrounded by an iron fence, extant in footings (242) and two gateposts (241), and had a camphor laurel avenue leading to the gate on Jamieson Street.

Transportation Infrastructure and *Changing Environment* are key themes in the history of the establishment and development of the site. The original facility was placed as close as possible to the unloading point of the wharf, and linked to it by a light rail system to transport the explosives. The original magazine and newer ones, were built into the hillside to allow some natural blast containment and faced out onto an empty wetland. The Jamieson Street entry was the point of road access. The river was the link with the Harbour, which was the source of gunpowder from ships, stores and naval facilities.

The environment also played a determining role in the evolution of the precinct as the availability of flat land for the light rail system and the design of blast containment measures determined the placement of buildings. There is a close relationship in this precinct as in the other three, between topography and building function. The precinct is divided into two landscape areas; the flat areas close to the riverfront and the hill to the south. Those elements on the hill reflect the themes of Staff Facilities and Depot Administration, while those below on the flat land generally reflect Armament Storage and Inspection & Testing. All these elements are linked by Transportation Infrastructure, the nature of which is determined by topography - light rail in the flat areas, roads on the rises.

The administration facilities on the hill are linked to the original depot and the wharf by roads. A roadway leads from the wharf, past the storehouses, up the hill to Jamieson Street. Along this roadway are a number of workshops built in the 1940s and a 1929 stable, which housed the police horses. The offices for the Police (1) were sited at the gateway on Jamieson Street.

The buildings on the hill area performed mainly staff and administrative functions. They were sited away from dangerous operational areas, close to the road access point and staff facilities. The first buildings were three 1897 bungalow residences for officers and staff

(118, 123, 126). These illustrate the isolation of the early Depot from housing areas and the requirement to provide 24-hour emergency and security staff at the facility.

In the 1920s an office was added (6) with naval flagpole and changing room (5) and in the 1940s another building for a cafeteria (4) and training (105). Another small 1897 residence (139) to the south west of the original magazine was sited on the brow of the hill and linked by footpaths to the workshops. The functions of all these buildings have changed over the years to reflect changing explosives regulations and storage regimes, but the general patterns of siting and function, which were maintained from the point of establishment until the 1940s are still extant.

Elements which reflect the themes of Armament Storage and Inspection & Testing, are directly linked by Transportation Infrastructure. The siting of the explosive storehouses was determined in the first place by blast containment considerations, which in turn was influenced by the site topography. The process of inspection and testing of the ordnance before it was placed into storage, determined the placement of workshops between the point of unloading on the wharf and the storehouses. All these inter-relationships can be seen in the layout and structures of the precinct today.

The area close to the wharf is dense with storage and workshop buildings. Workshops and office buildings were sited before storehouses, as a means of facilitating the administrative, inspection and storage processes. This pattern was retained over time with the addition of new buildings before 1940 as the Armament Depot prepared for the advent of WWII. Four workshops were built between the original magazine and the gatehouse, and adjoined the 1897 explosives workroom (140). The explosives workrooms (141, 144, 145, 146) were sited to continue the pattern of inspection and testing prior to storage. In 1937 a second explosives storehouse (21) was built beyond the 1897 magazine (20), repeating the techniques of building into the hillside to take advantage of natural blast containment.

On the wharf itself where the bulk of explosives handling was carried out, are two stores (13, 15), which performed temporary storage functions. Two large industrial cranes (247) built in 1973, replaced two other cranes from 1929. These lifted stock onto the wharf from concrete lighters, which were moored at Spectacle Island. The wharf was the main hub of the Depot transport system with multiple light rail tracks and transport buildings and therefore acts as a focal point for all other transport infrastructure elements in the precinct. The wharf has undergone two major refurbishments, in 1924 and 1940.

From the wharf a light rail line goes to the west servicing two brick explosives storehouses (7, 8) of the Interwar period, which have been built to take advantage of the hillside. The hillside provides a safe area for the administration facilities and also a natural blast containment landform for the storehouses, thus patterns of siting are repeated from 1897, 1937 and 1940 constructions. To the south the light rail travels from the wharf through the workshops and storehouses of the original facility, to two 1920s timber framed non-explosives stores (22, 24) below the hill. All the storehouses are built on level ground with level access provided for the light rail.

The operational processes and interpretive themes of the original establishment precinct are demonstrated not only in the relationships between the elements, but also in the building

details. The roofs of the workrooms and storehouses are crossed by systems of lightning prevention with conductors, earthing strips on all fixtures and low fire-risk materials. The internal fixtures and equipment are all designed for spark prevention and fire minimisation. Over the period of development of explosive storehouses, 1897-1940, materials and types of explosives changed but the principles of siting did not. The building functions and work processes are illustrated in occupational health and safety signage, explosives warning signs and handling fixtures such as gantries, benches, tools and fire fighting equipment, which again illustrate the development of explosives technology.

**Table 2. List of buildings, features and items in Early Naval Occupancy Precinct**

<b>Number</b>	<b>Name and date of construction</b>	<b>Interpretive Theme</b>
16	Detonator Storehouse 1937	Armament Storage
18	Explosives Storehouse 1938	Armament Storage
28	Office c.1940s	Depot Administration
29	Toilet c.1940s	Staff Facilities
30	Empty Package Store 1922	Armament Storage
33	Explosives storehouse c.1928	Armament Storage
34	Pyrotechnic store 1939	Armament Storage
35	Explosives Storehouse c.1939	Armament Storage
36	Explosives magazine c.1922	Armament Storage
37	Explosives magazine c.1922	Armament Storage
38	Explosives magazine c.1922	Armament Storage
39	Explosives magazine c.1922	Armament Storage
41	Toilet c.1930s	Staff Facilities
127	Warhead Examining room c.1924	Inspection & Testing
128	Shell scraping room c.1924	Inspection & Testing
129	Shell marking room c.1924	Inspection & Testing
154	Soldering room 1939	Inspection & Testing
155	Shell examining room 1926	Inspection & Testing
156	Shell examining room 1926	Inspection & Testing
157	Shell examining room 1926	Inspection & Testing
158	Explosives workshop pre.1950s	Inspection & Testing
159	Explosives workshop pre.1950s	Inspection & Testing
160	Office c.1940s	Depot Administration
161	Amenity block 1944	Staff Facilities
163	Office c.1944	Depot Administration
164	Explosives workshop c.1980s	Inspection & Testing
190	Heat test room 1939-41	Inspection & Testing
191	Colour test room 1939-41	Inspection & Testing
192	Proof house 1939-41	Inspection & Testing
193	D.A. Proof house 1939-41	Inspection & Testing

<b>Number</b>	<b>Name and date of construction</b>	<b>Interpretive Theme</b>
194	Toilet c.1939	Staff Facilities
196	Water tower	Depot Administration
200	Toilet c.1897?	Staff Facilities
235	Light railway 1897-1909	Transportation Infrastructure
243	Road b/n woodland & wetland c.1920s	Transportation Infrastructure
244	Foreshore road c.1930s	Transportation Infrastructure
248	Fascine banks along river foreshore and sandstone sea wall c.1890	Changing Environment

## 4.4 Early Naval Occupancy Precinct

### 4.4.1 Description of the Precinct

This precinct is situated in the northeast corner of the MPHP site (see **Figure 4.3**). It provides evidence of the period of expansion of the Armament Depot during the decades prior to World War II. This precinct is characterised by the great distances between groups of buildings and the ribbon expansion into areas with little dry and stable land. The light rail system was extended to the west to provide access to newly built stores, workshops, laboratories and explosives storehouses between the woodland and salt marsh. Several small buildings used for the proofing of ammunition are isolated between the river and the mangroves, four large storehouses are built along the edge of the wetland and five storehouses fringe the woodland on the eastern boundary.

This precinct contains within it structures, infrastructure and landscape elements which document the development of the Depot from the 1920s to the 1940s. The shape of the wetland with the remains of the 1890s fascine dyke and stone sea wall (248) indicate a period of early landfilling prior to the construction of the magazine. The wetland is a valuable remnant of salt marsh and mangroves, which indicates the character of the area before European settlement. The landscape within the precinct reflects the themes of *First Australians*, *The Changing Environment* and *Defence*. The structures and some landscape elements reflect the five sub themes; Depot Administration, Staff Facilities, Armament Storage, Inspection & Testing and Transportation Infrastructure.





#### 4.4.2 Analysis of the Early Naval Occupancy Precinct

This precinct contains within it the whole of that area which can broadly be described as wetland. This area of salt marsh, mangrove and casuarina stands was once part of the tidal mud flats of the Parramatta River. The wetland environment and the perception that it was an isolated and unproductive area of land coloured the development of this precinct. The function of the buildings and the disposal, which occurred in the wetland, reflect the lack of value placed on the wetland at that time. The theme of *The Changing Environment* is therefore closely associated with *Defence* and the placement of structures within the precinct. The remediation of the wetland environment for the Parklands, with the reinstatement of tidal flushing and other efforts to restore the salt marsh, demonstrate the continuing history of environmental change on the site and the continuing impact of humans on the environment of the Depot, and new approaches to ecological restoration.

The difficulty of building in the wetland affected the patterns of development of the precinct once expansion for Defence purposes became a pressing concern. Available land was scarce and the great distances, which separate areas of development, therefore distinguish the precinct. In 1890, reclamation of the foreshore began and the fascine banks were built, followed by the sandstone sea wall (248). The foreshore was shaped artificially and the shape remains to this day. From the wharf the light rail system turns east to an explosives storehouse (18) built in 1938. The storehouse is isolated within earth surrounds in an expanse of open grass on the edge of the salt marsh. It was built on reclaimed land, at the same time as those on the western side of the Original Establishment precinct, and its design mirrors those of Buildings 7 and 8. Its siting demonstrates the outer limits of flat and firm ground close to the wharf and the pressing need of the Armament Depot to expand prior to World War II.

The environment played a key part in determining the layout of structures in the precinct, and the design of blast containment measures. The availability of land and the laws governing separation distances between explosives storehouses determined the placement of buildings. There is a close relationship between environment and building function. The precinct in fact contains three areas of development, which relate to landscape type and the ecosystem; the riverfront, the wetland and the casuarina forest. The building elements in these areas generally reflect the sub themes of Armament Storage and Inspection & Testing. All these elements are linked by Transportation Infrastructure, the nature of which is determined by the topography.

The light rail system continues in flat areas to service the workshops and storehouses of the precinct. From the centre of the site it branches east and passes along an area of dry flat land between the woodland rises and the wetland, fringed by dense Casuarina stands. The ribbon development in this area reflects the narrow corridor of land available for building in the Interwar period.

The first building along the light rail line is an administration office (28) from the 1940s, three workshops (127, 128, 129) from 1924 and a storehouse (30) from 1922. As in the first precinct there is a strong relationship between thematic elements with an order approximating - Administration, Inspection & Testing and Armament Storage. This pattern was maintained even as the site evolved, buildings were added and technology of explosives changed. These

patterns of siting buildings of particular functions together is shown particularly well in the casuarina area.

The light rail passes along the edge of the casuarinas from Building 30 and reaches a picturesque area of small offices, facilities and workshops. In a line from west to east are a large toilet block (161) from 1944, an office (160) from the 1940s and another office (163) from 1944. Two additional workshops (158, 159) were added from the late 1940s and then three inspection workshops (155, 156, 157) from 1926. At the end was built a soldering room (154) in 1939, before a large explosives storehouse (35) of the 1940s. As this development indicates, the addition of buildings over time was kept to the existing patterns of Administration, Inspection & Testing and then Storage, linked by Transportation Infrastructure.

The light rail extends from this corridor in a parabola around the natural curving rise of the woodland to finish at a series of four Magazines (36, 37, 38, 39) built ca.1922. These isolated magazines have been built into the hill providing some natural blast containment and face out onto what was once empty marshland. The isolation of the area was exploited by siting the storehouses with their backs to the woodland and their faces to the marshes, where the effect of any blast would be minimal. Their distance from the wharf indicates the lack of flat land at this stage of the Armament Depot's development.

Even more isolated, was a bomb storehouse (33) built in 1928 for HMAS Albatross on an island of firm ground in the wetland. The light rail was extended out to the site and in 1939 a pyrotechnic store (34) was built at the eastern extremity of the wetland. The natural boggy, landscape although restricting expansion, also provided for isolation and minimisation of blast impact for these high-risk storehouses. The environment in this area, once reclaimed for Defence uses is now remediated. The wetland, which was once discouraged, is now being replanted and water reintroduced to encourage birds and mangrove regrowth.

Along the riverfront east of the wharf, was another operational area, which exploited the isolation of the wetland. The proofing ground was a series of workshops and laboratories for the testing of explosive ordnance. These proofing facilities (190, 191, 192, 193) were all built between 1939-41 and are linked to the main area of activities by a foreshore road along the sea wall. The reclaimed riverfront was an isolated strip of firm ground between the river and the mangroves behind, and the remains of the 1890s fascine bank and sandstone sea wall can be seen in parts. Also in this area was a burning ground and explosive disposal area, which took advantage of the limited use, which the Depot could make of the wetland.

The operational processes of the precinct are demonstrated not only in the relationships between the thematic elements, but also in the construction of the buildings. The explosives magazines and workrooms of the 1920s have small porches at the front of the building where staff could change into regulation clothing. The workshops of the 1920s and 1940s are built to accommodate only two men at a time, restricting the amount of material that could be handled and thereby reducing the risk to staff. Workshops are constructed in rows along the light rail, and as an added precaution it was common to use only every second workshop at a time.

As in all the workshop and storage areas Staff Facility buildings are present. The ubiquitous toilet blocks, which are dotted all over the site, reflect the great distances, which the staff had to move from the main administration area on Jamieson Street. The work patterns of the staff meant that much time was spent in one area, moving from workshop to storehouse and back. Staff facilities and small administration offices in workshop areas were necessary to keep work practices efficient.

Lifting and moving processes were vital to the work of the Depot and these functions can be seen in the operational fixtures of the buildings. The large 1920s storehouses have the light rail passing through the centre of the building. The storehouses of the 1930s and 1940s were fitted with internal gantry cranes and similarly the workshops were fitted with external gantries to move stock from the light rail into the building. The 1920s workshops used gantries and porches. As in the first precinct all the roofs are crossed by systems of lightning prevention with decorative conductors, earthing strips on all fixtures and low fire-risk materials.

**Table 3. List of buildings, feature and items in RAN Wartime Expansion Precinct**

Number	Name and date of construction	Interpretive Theme
31	Explosives Storehouse c.1937	Armament Storage
42	Explosives Storehouse c.1939	Armament Storage
43	Explosives Storehouse c.1939	Armament Storage
44	Explosives Storehouse c.1939	Armament Storage
45	Explosives Storehouse c.1939	Armament Storage
46	Explosives Storehouse c.1939	Armament Storage
47	Explosives Storehouse c. 1939	Armament Storage
130	Explosives Workshop c.1930s	Inspection & Testing
131	Explosives Workshop c.1930s	Inspection & Testing
132	Explosives Workshop c.1930s	Inspection & Testing
133	Office c.c.1930s	Depot Administration
134	Electromobile Garage c.1939	Depot Administration
135	Toilet Block c.1939	Staff Facilities
136	Toilet Block c.1939	Staff Facilities
199	Toilet Block c.1930s	Staff Facilities
235	Light Rail 1897-1909	Transportation Infrastructure
237	Burma road c.1930s	Transportation Infrastructure
245	Louise Sauvage Pathway c.1999	Transportation Infrastructure
246	Burning Ground c. 1930s	Inspection & Testing

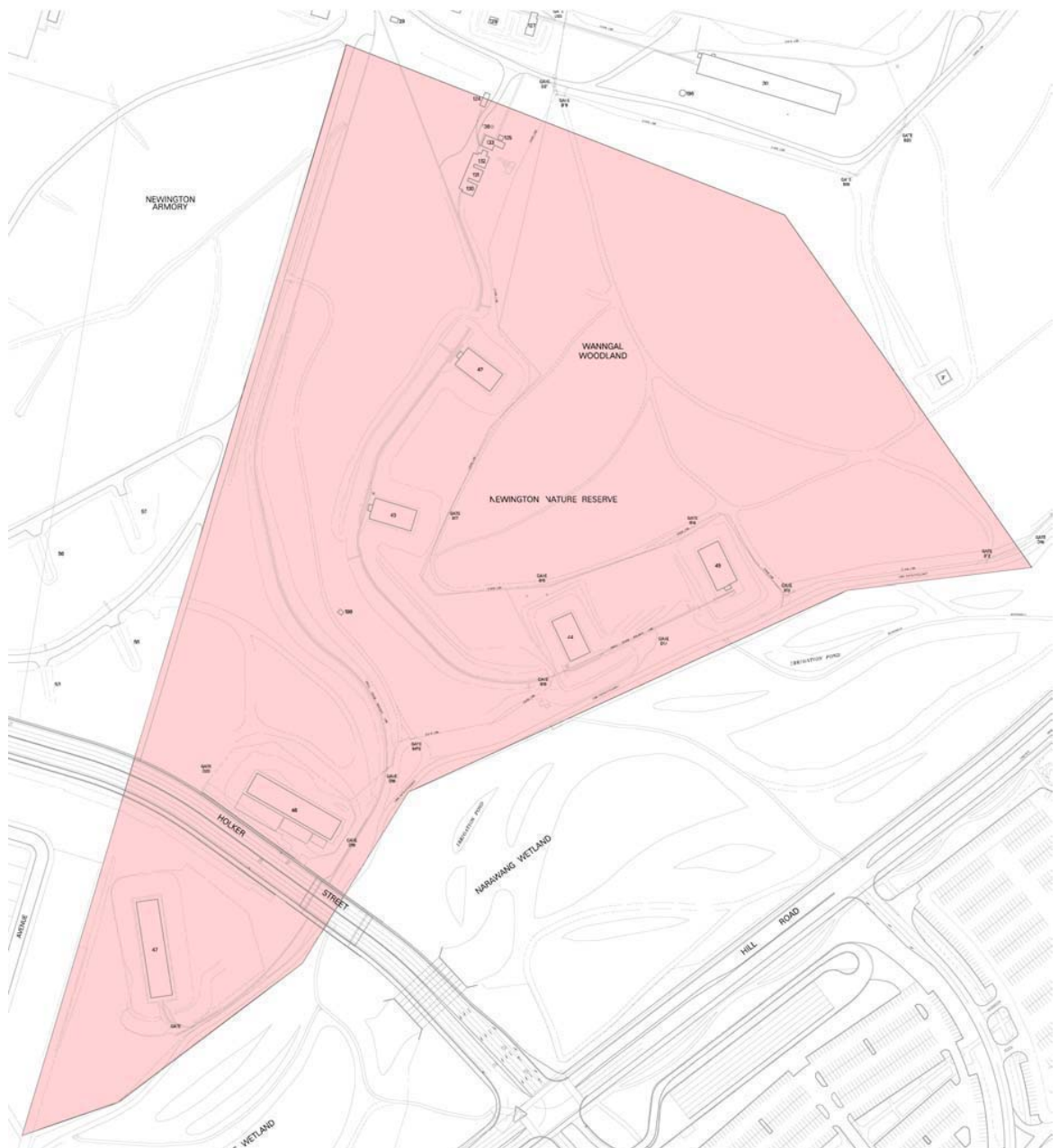
## 4.5 RAN Wartime Expansion Precinct

### 4.5.1 Description of the Precinct

This precinct is situated along the central and southern edge of MPHP (see **Figure 4.4**). It includes woodland as well as undulating lands to the south. The woodland is a remnant of Cumberland Plain forest in metropolitan Sydney. Within the woodland there is evidence of Aboriginal occupation of the site in the form of several stone artefacts, which are likely to be of historic and social significance to the Aboriginal community. It demonstrates the second major expansion of the Armament Depot during the years preceding and during WWII to service the Royal Australian Navy. It contains a group of RAN storehouses and associated workshops and the first period of major roadway development in the Depot.

This precinct contains within it structures, infrastructure and landscape elements which document the development of the Armament Depot during the build up to the Second World War. The landscape within the precinct reflects the three major interpretive themes of the site; *First Australians*, *The Changing Environment* and *Defence*. The structures and some of the landscape elements reflect the five historical sub-themes of the site; Depot Administration, Staff Facilities, Armament Storage, Inspection & Testing and Transportation Infrastructure.





**Figure 4.4.** MPPH RAN Wartime Expansion Precinct

#### 4.5.2 Analysis of the RAN Wartime Expansion Precinct

The most distinctive area within this precinct is the woodland. The woodland area, like the wetland, was a landscape, parts of which were shaped by the needs of the Armament Depot. The woodland possesses a strong relationship to *First Australians* and *The Changing Environment* themes and demonstrates the continuing history of environmental change on the site, including the way in which regeneration can occur as the underlying ecological processes continue and are appropriately managed, whether by accident or by intention.

The linkage between *First Australians* and *The Changing Environment* is shown by the displacement of Aboriginal use of the woodland by European use. The woodland was largely preserved from wholesale clearing which occurred over the rest of the MPHP, though it would have been utilised in timber getting which was carried out in the time of Blaxland's Newington Estate. Sheep and cattle from the State Abattoir would have grazed the area and during the period of occupation by the Navy, the area was regularly mown to reduce fire hazard.

By the outbreak of WWII availability of land became an urgently pressing concern. The woodland would almost certainly have been sacrificed if flat and cleared ground had not become available to the south. The woodland does contain one 1937 magazine building (31) which was set into the ground maximising blast containment on all sides, serviced by a light rail line. The woodland was, similarly to the wetland, seen as a buffer for explosives stores and as a convenient place for dangerous disposal practices.

The siting of structures in this precinct is determined as it has been in other precincts, by availability of land and blast containment considerations. This precinct also sees the arrangement of structures following the pattern of administration, workshop and then storage, linked by transportation infrastructure. From the centre point of the site the light rail line goes east, south and southeast. The southeast line leads to a garage (134), an office (133), toilets (135) and three workshops (130, 131, 132) all built in the 1930s. These were built to service the explosives storehouses further along the spur line of the light rail, which connects them.

These brick storehouses (42, 43, 44, 45) were built in 1939, of identical design, to store cordite, which requires maintenance at a constant temperature. They are all accessed by the light rail, which due to the storehouses being cut into the rise of the woodland, runs through a steep cutting. The arrangement of the storehouses in a U shape, takes advantage of the woodland hillside, maximising the available land to best effect and creating efficient blast separation between the storehouses, which faced out onto empty marshland.

From the centre of the site to the south, another light rail line services explosives storehouses (46, 47) built at the start of the Second World War. One of these is on the other side of Holker Street, but connected by the Louise Sauvage Pathway (245) to the rest of the MPHP. These galvanised iron storehouses are probably the most simple of all the storehouses, with a single entrance at the front through a massive earth berm. They were built at a time of mounting pressure and probably reflect the need for speed as well as cheapness of materials. These were the last storehouses built on the site, which relied on the light rail for transport. It is interesting to note that these are the only items, which do not conform to the previous arrangement of workshops placed in direct relationship to stores. It may be that by this time

the packaging of explosives and the enormous quantities that were handled during the Second World War meant that the normal workshop arrangement was inadequate.

The operational changes wrought by the advent of trucks and the volume of work that was carried out during the War can be seen in the changing nature of storehouse construction and the development of roads. This precinct is the first to develop an extensive road system as the introduction of trucks saw the light rail become inefficient. The Burma Road (237) which runs down the centre of MPHP transported stores and staff to the areas to the south as well as to the State Abattoirs and Brickworks which were also used as storage during critical periods. The Louise Sauvage Pathway was a connecting road along what was once empty marshland, between magazines on the eastern side of the woodland and those on the western side.

**Table 4. List of buildings, features and items in US Navy Utilisation Precinct**

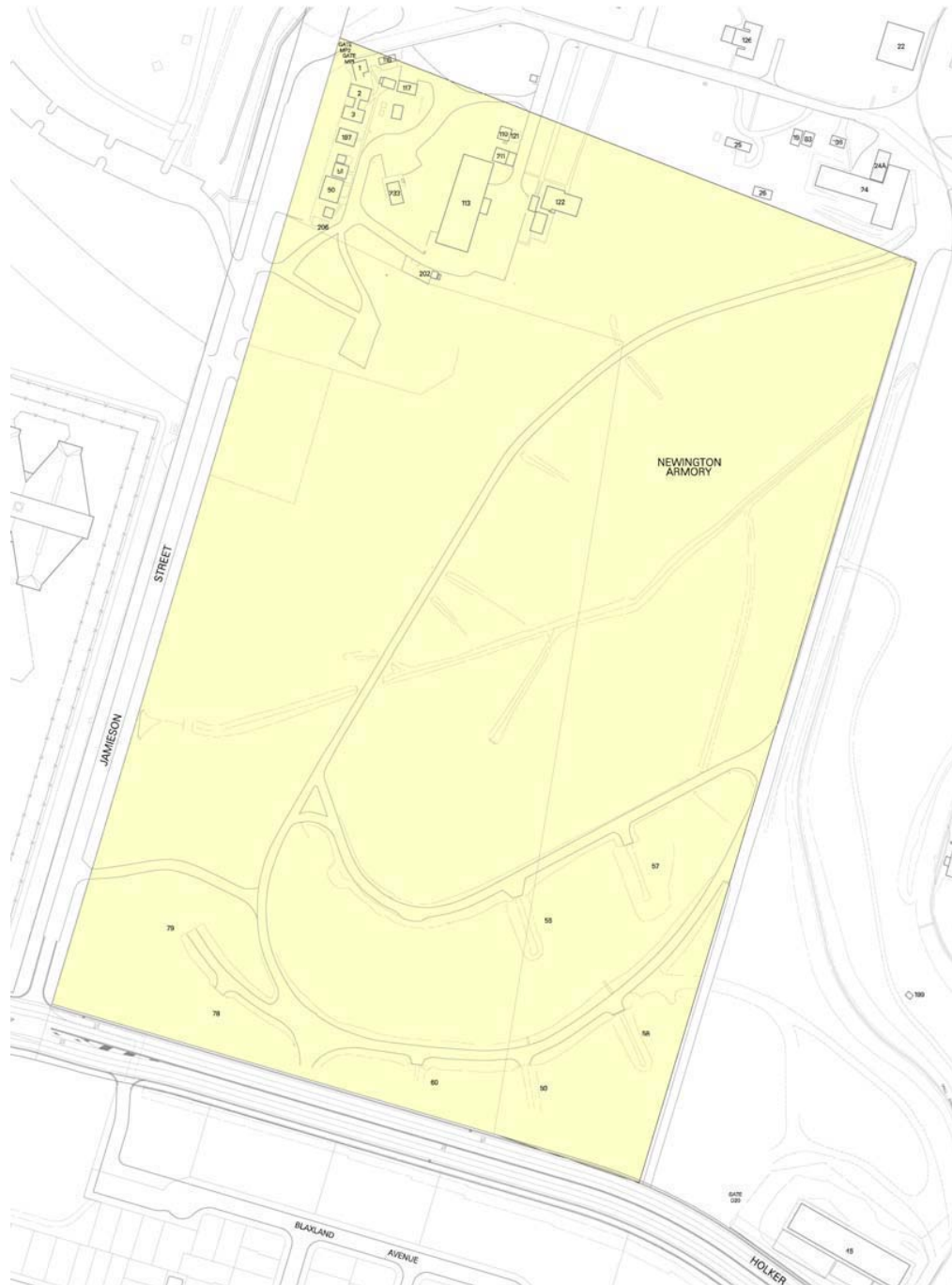
<b>Number</b>	<b>Name and date of construction</b>	<b>Interpretive Theme</b>
50	Joiners Shop pre.1950	Depot Administration
51	Timber store pre.1950	Depot Administration
56	Explosives Storehouse 1942-43	Armament Storage
57	Explosives Storehouse 1942-43	Armament Storage
58	Explosives Storehouse 1942-43	Armament Storage
59	Explosives Storehouse 1942-43	Armament Storage
60	Explosives Storehouse 1942-43	Armament Storage
78	Explosives Storehouse 1942-43	Armament Storage
79	Explosives Storehouse 1942-43	Armament Storage
113	Workshop/garage 1966	Depot Administration
122	Residence c.1940s	Staff Facilities
206	Joiners Store c.1939	Depot Administration
207	Fire Store	Depot Administration
208	Fire Store	Depot Administration
209	Fire Store	Depot Administration
211	Sailmakers Shop	Depot Administration
233	Fitters Workshop c.1980s	Depot Administration

## 4.6 US Navy Utilisation Precinct

### 4.6.1 Description of the Precinct

This precinct is situated to the south of the original facility area on the wharf, and to the west of the Burma Road (see **Figure 4.5**). The precinct contains explosives storehouses erected for the US Navy, round a road system known as the Banana. Also located within this precinct are administration buildings and general workshops, erected during the Interwar years, generally clustered to the south of the access gate on Jamieson Street. The landscape in this precinct is grassland, with scattered trees (some of which appear to be regrowth from original woodland) and an undulating character. A creek line meanders through the site, probably following the course of the original drainage line.

This precinct contains within it a landscape arrangement, which reflects the three major themes of *First Australians*, *The Changing Environment* and *Defence*. The structures within the precinct reflect four of the sub themes of the site; Depot Administration, Staff Facilities, Armament Storage and Transportation Infrastructure.



**Figure 4.6.** MPHP US Navy Utilisation Precinct



#### 4.6.2 Analysis of the US Navy Utilisation Precinct

This precinct has an historical association with Blaxland's Newington Estate, the subdivision of the Estate in the early twentieth century and the period of grazing by the State Abattoir. This area of grassland therefore provides interpretive linkage between the themes of *First Australians* and *The Changing Environment*. The area along Jamieson Street, being high and firm ground would have been cleared and grazed during the period of occupation by Blaxland. When the region began to develop closer settlement, it was marked out into subdivision from which the arrangement of Jamieson and Holker Street is derived. The area was then leased to the Meat Board as grazing paddocks for the State Abattoir across the marshland on Homebush Bay. The clearing, grazing and later the constant mowing by the Navy has left this precinct with the appearance of an undulating paddock, strengthened by the placement of buildings under earth berms.

There are few obvious structures in this precinct, many temporary buildings have been taken away, and the large storehouses are underground, which heightens the sense of emptiness. The arrangement of buildings is deliberately sparse and well spaced to mitigate blast damage and guard staff safety. This precinct shows an interesting development in the absence of inspection and testing facilities. The storehouses (56, 57, 58, 59, 60, 78, 79) in this precinct are all underground explosives storehouses built by and for the United States Navy during their Pacific campaigns in WWII. The lack of inspection and testing facilities indicates that testing may have occurred in other precincts or outside of the Depot. This precinct is also unique in that it does not have light rail. During the Second World War, trucks replaced light rail for delivery and transport of stores and the visual dominance of road systems in the precinct illustrates this.

The staff and administrative areas for the US storehouses were built a long distance from the storehouses, on the natural rise near the Jamieson Street entrance. This area had already been developed in the Interwar period for administration functions and so the choice of the hill was not guided by topography so much as centralising of administrative functions. The function of the buildings is also quite different to that in other precincts with sail maker (211), joiner (50) and fitters (233) shops all constructed during WWII. A residence (122) was built during the 1940s, possibly to service American personnel and a garage (113) was added in the 1960s.

The underground explosives storehouses were constructed in 1942-3, by either the US Navy wartime construction troops or by Australian contractors. The gentle rises towards Holker Street were used to their best advantage, with explosives storehouses cut into the hill and facing out onto the road. Blast containment measures as well as the most efficient use of space were the main stimulus for the arrangement here. Linking the storehouses is a road system, which takes the shape of two crescents, hence the name for this area, the Banana.

The Banana is linked to the wharf by the main north-south route in the Depot, the Burma Road. Stores still arrived mostly via the river and therefore the wharf is still the focal point for this precinct. Between the administration area and the storehouses is a natural gully, which has a deep drainage channel, which drains the storehouse and administration areas. This channel appears to follow the original creek line that drained the catchment.

PART C

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# Significance of the Resource

## 5.0 Heritage Significance

### 5.1 Statement of Significance

The MPHP at Newington is of State significance as a rare and extensive military/industrial landscape, with largely intact natural, Aboriginal and Historic cultural features, which clearly demonstrate the natural and cultural development of the site.

The wetland and woodland areas have high natural heritage values because they are rare remnants of ecological communities and ecosystems that once dominated this region.

Within the woodland area there is evidence of Aboriginal occupation of the site in the form of several stone artefacts, which are likely to be of historic and social significance to the Aboriginal community. This needs to be established by further research.

The Precinct contains a wide variety of functionally related blast containment structures, support buildings, transport networks, landforms and movable items associated with the storage and handling of explosive ordnance, all of which were closely integrated with the topography and other natural features of the site. It also contains significant natural landscapes, which preserve regionally rare ecological systems.

The site clearly demonstrates the combination of factors that influenced its evolution and development since the 1890s. These factors include the growth of the Royal Australian Navy, the advent of the Second World War, changing explosives technology and explosive ordnance regulations and the availability of land. This is reflected in the minimum separation distances between explosives storehouses, the evolving technology of the building stock, ribbon development through the wetland, the isolation of buildings around the woodland and the development of the light rail system.

All of the structures in combination with their operational fixtures and equipment and the way in which the natural landscapes have been utilised and modified, contribute significantly to an understanding of explosives storage and the evolution of the Armament Depot.

The Armament Depot formed part of a historically significant network of naval sites in the metropolitan area that express the strategic importance of Sydney in the Pacific region in the early decades of the twentieth century. The Armament Depot played a vital role in naval fleet operations, being the major depot for the storage of explosive ordnance, and historically linked to other magazine sites such as Goat and Spectacle Islands. MPHP still contains a rare combination of buildings and landscape features which were constructed by and for the Royal Australian Navy and US Navy, which are of National significance in demonstrating the logistics support which Australia gave to her allies during the Second World War.

The cultural landscape of MPHP includes evidence of early 19<sup>th</sup> century industrial ventures and pastoral activities of the Blaxland family.

The landscape of the river edge wetland, mangroves and woodland areas, although influenced by a century of pastoral and military utilisation, exhibit important aesthetic features, in great visual contrast to the carefully maintained grassland of the operational areas.

## 5.2 Assessment Criteria

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

MPHP is historically significant for its preservation of evidence of Aboriginal and European occupation along the Parramatta River. It demonstrates the early occupation of lands at Homebush by Europeans, only nine years after the area was first sighted by members of the First Fleet, who remarked on the presence of Aboriginal people in the area. It was the site of an early land grant to pastoral and industrial entrepreneur John Blaxland (1769-1845) whose family were influential in the early history of the colony. The site demonstrates the importance of the Parramatta River in the opening up of the colony and the early rural settlement of areas close to Parramatta. Its historical importance as an Armament Depot lies in its demonstration of the evolution of systems and regulations of explosives handling and storage over 90 years and the role of Sydney as a major port for the Australian naval fleet. It is highly illustrative of the extent of involvement of the Royal Australian Navy and US Navy in the Second World War and the logistics support provided by Australia to her allies.

**Criterion (b) – an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW’s cultural or natural history (or the cultural or natural history of the local area);**

MPHP has historical associations with John Blaxland (1769-1845) who arrived as a free settler in 1806. He was a speculative and entrepreneurial man who held official posts as a magistrate and non-official member of the Legislative Council. The site has a long association with the personnel of the Royal and Royal Australian and US Navies, through its use, from 1895-1999, as the principal naval armament depot that supported fleet operations based in Sydney.

**Criterion (c) – an item is important in demonstrating aesthetic characteristics and/or high degree of creative or technical achievement in NSW (or the local area);**

MPHP comprises a number of different landscape types - woodland, wetland, and an open park-like area with ornamental trees and landforms, which gives the area great visual interest, viewed from within the Parklands and from the river. The unusual patterns and formation of blast mounds, light rail and sunken roads, which cut through the landscape, provide a sense of interest and linkage. The different building types from different periods of expansion, such as Federation, Inter-war and Second World War, display interesting and picturesque details of lightning and spark prevention, safety and handling features. The working environment of the site provides a very pleasing landscape of built features interspersed by woodland and wetland, all of which provides architectural, engineering and aesthetic interest.

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

The presence of stone artefacts provides evidence of Aboriginal occupation and use, and is likely to be of cultural significance to Aboriginal cultural and administrative organisations within whose boundaries the area lies. MPHP has great significance to the thousands of civilian naval employees and their families, who worked and sometimes lived, at the Armament Depot. The importance of the work carried out at the site and the occupational health and safety procedures that the dangerous work necessitated, is clearly illustrated by the remaining structures. The work of the Armament Depot has great social significance to the community as part of a network of sites, which provided for the general defence of Australia and her Allies during the Second World War. The nature of the work carried out at the Armament Depot has great significance to members of the community with an interest in armaments, explosive ordnance and military history.

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

The saltwater wetland area is significant as a research site that can benefit the wetland and provide a model for managing other wetlands. There are very few wetlands where the tidal regime can be similarly monitored and managed; this provides one of the best possible opportunities to understand such areas and test the outcomes of a range of management prescriptions. The woodland provides the opportunity to monitor and understand recovery processes of this ecological community and the individual species within it. The soils of this area are a rare intact example that will provide information about management of soils that are generally disturbed by urban development.

MPHP displays a high degree of integrity of its structures, natural landscapes, buildings and movable heritage items. As such it has high potential for interpretation and research into technological developments in explosives handling and storage. It illustrates the development of blast containment structures and design philosophies to accommodate changing international explosives regulations. The buildings constructed for the US Navy during the Second World War are significant examples of military storehouse technology. Specific building types demonstrate the adaptation of building technology for armaments handling and storage and the specific nature of armaments work practices. The natural environment contains habitats that are increasingly rare in the area and which Harbour rare flora and fauna species that provide opportunities for scientific research. The presence of stone artefacts suggests that there may be further physical evidence present that illustrates the associations of the Aboriginal people to the place.

**Criterion (f) – an item possess uncommon, rare or endangered aspects of NSW’s cultural or natural history (or the cultural or natural history of the local area); and**

The precinct includes the only remaining example in the Sydney region of a complete estuarine zonation, from Cumberland Plain Woodland through to Casuarina Closed forest,

and then saltmarsh to mangroves in the intertidal zone. Almost all similar vegetation sequences have been cleared in this part of the Sydney Basin.

The precinct's woodland is Sydney Turpentine Ironbark Forest one of the Cumberland Plain's seventeen ecological communities. It is listed as an Endangered Ecological Community under the *Threatened Species Conservation Act, 1995* and listed as vulnerable nationally under the *Environment Protection and Biodiversity Conservation Act, 1999*. Sydney Turpentine Ironbark Forest has been almost entirely cleared. Forty-one bird species have been recorded in the woodland, which have a high density of hollows and nesting places. A pair of White-bellied Sea-Eagles (*Haliaeetus leucogaster*) nests there; this species is listed on China Australia Migratory Birds Agreement (CAMBA). There is a breeding population of the Red-rumped Parrot (*Psephotus haematonotus*), a species uncommon elsewhere in the Sydney region.

This is the most varied and extensive wetland/lagoon complex of saltmarsh and mangrove habitat within the Upper Parramatta River system. The saltmarsh wetland habitat in this precinct is an important component of the remaining saltmarsh community in New South Wales; since European settlement, over eighty percent of the saltmarsh habitat in the Sydney region has been lost, and in the Upper Parramatta River area, there has been a loss of 92% of the original saltmarsh area.

The precinct's saltmarsh flora has biogeographical interest. Three plant species are important: *Wilsonia backhousei*, listed as vulnerable in NSW, is present in the largest remaining stands in the Sydney region; the *Halosarcia pergranulata* population is the only known location of this species occurring on the New South Wales Coast; and *Lampranthus tegans*, known only from the Sydney region and Victorian coast, has its status in terms of natural or cultural heritage significance yet unresolved, but there is agreement that it should be conserved here.

The combination of saltmarsh, intertidal and freshwater wetland around Homebush Bay provides one of the few secure regional habitats for migratory waders because almost all other wetland areas on the Parramatta River are subject to extreme human disturbance pressure. Twenty bird species recorded for the wetland are listed in the Japan Australia Migratory Birds Agreement (JAMBA), and nineteen species in China Australia Migratory Birds Agreement (CAMBA). Listed species include support Black-winged Stilt (*Himantopus himantopus*), Latham's Snipe (*Gallinago hardwickii*) and Curlew Sandpiper (*Calidris ferruginea*). The Mangrove Gerygone (*Gerygone laevigaster*) is recorded here, near its southern limit of distribution. The saltmarsh community provides habitat for Sydney's largest population of White-fronted Chat (*Ephthianura albifrons*). Over 50 non-migratory bird species also use the wetland areas.

The endangered Green and Golden Bell Frog (*Litoria aurea*) have been recorded within the brackish pond (Wharf Pond) located between the freshwater catchment and intertidal wetland.

The relatively unmodified habitats provide a reference and benchmark with which to compare and understand original vegetation and soils of Sydney coastal estuarine zones.

The Royal Australian Navy Armament Depot at Newington was unique in the history of New South Wales for its role as the major storage and supply depot of explosives naval armament to service the fleet facilities in Sydney Harbour from 1895-1998. It was the only site in NSW where there was a combination of operational activities and physical facilities for the Australian, the US and the Royal Navies in this regard.

**Criterion (g) – an item is important in demonstrating the principal characteristics of a class of NSW’s cultural or natural places.**

The woodland and wetland areas of the site demonstrate the characteristics of their respective classes of ecological community, and in each case, these communities are no longer widespread, and so they are now very significant in this respect.

MPHP is a fine example of an historic former armament depot. It exhibits characteristics, which are typical of many other Australian armament depots, but is unique in the extent of its preservation of a variety of elements from the full extent of its history. An outstanding setting further enhances it and the integrity of the natural and cultural elements combined.

### **5.3 Significance of precincts**

In order to better interpret and analyse the historic aspects of the site, the site was divided into four precincts. These precincts can be assessed separately for their contribution to the overall significance of the site.

#### **5.3.1 Original Establishment Precinct**

The Original Establishment precinct is significant for its historical association with the earliest European land grants on the site as well as the period of occupation by Blaxland.

It contains structures, which demonstrate the C19th occupation of the site as a powder magazine and the subsequent evolution of explosives handling, blast containment and storage technologies until the 1940s.

It contains a significant collection of Inter-War, Second World War and Federation buildings with picturesque and interpretive design elements, such as signage and operational fixtures.

The 1897 powder magazine, gatehouse and workshops have architectural and technical significance.

The landscape is a significant open area on the Parramatta River with views up and downstream and the wharf demonstrates the relationship of the site to the Harbour and naval sites downstream.



### **5.3.2 Early Naval Occupancy Precinct**

The wetland in the Early Naval Occupancy precinct is a significant landscape and ecological community, with, native species, and habitats that are now rare in the Sydney region.

The Early Naval Occupancy precinct is significant for its demonstration of the expansion of the site under the Royal Australian Navy at the beginning of the twentieth century.

It contains a number of workshops, explosives storehouses and magazines, which demonstrate the development of explosives handling, blast containment and storage technologies at a time when explosives were inherently unstable and before pre-packaged munitions.

It contains a significant collection of buildings from the Inter-War and Second World War periods with picturesque and interpretive design elements, such as signage and operational fixtures.

The integration of buildings and landscape in this precinct is significant as it demonstrates the scarcity of dry, flat land at the time and the industrial exploitation of the wetland. The remains of the 1890s fascine banks and sandstone sea wall which enclose the wetland are highly significant.

It contains a significant portion of landfilled riverfront from the 19<sup>th</sup> Century.

### **5.3.3 RAN Wartime Expansion Precinct**

The RAN Wartime Expansion precinct contains a remnant of Cumberland Plain woodland (Sydney Turpentine Ironbark Forest, an Ecological Endangered Community), which contains several stone artefacts testifying to the Aboriginal usage of the area. As evidence of Aboriginal occupation within the generally highly altered landscape of Homebush Bay, this is likely to be of some cultural significance to Aboriginal cultural and administrative organisations within whose boundaries the area lies. However this will need to be established through further research.

The RAN Wartime Expansion precinct is significant for its demonstration of the rapid building program and expansion of the site at the beginning of the Second World War and the development of the site into a major defence facility.

It contains a significant collection of explosives storehouses from 1939-1942, which demonstrate changing explosives technology and design principles. The storehouses and a number of workshops from the 1930s, have picturesque and interpretive design elements, such as signage and operational fixtures.

The use of the woodland rises for natural blast containment and the creation of flat contours for the light rail clearly demonstrate the topographical limitations of the site at this time.

### **5.3.4 US Navy Utilisation Precinct**

The US Navy Utilisation precinct is significant for its demonstration of the involvement of the United States Navy in the Pacific War, and the role of Sydney as a base for the Allies.

It contains a significant collection of underground explosives storehouses, which demonstrate US pre-fabrication, and explosives technology.

Its use of road networks rather than light rail demonstrates the greater role of trucks during the Second World War and the use of sloping ground for storehouses, which were dug into earth berms.

## **5.4 Comparative significance**

MPHP is in its overall significance, a unique site with few comparable examples in New South Wales.

Comparison of the historic values Australia wide however, shows that sites of a very similar nature occur with surprising frequency. On the Australian Heritage Places Inventory there are over 100 sites listed as containing explosives, armaments or powder storage magazines, and many of these also contain elements of natural landscapes of great significance.

Due to the specific requirements of explosives storage, the siting and landscape nature of the sites show similar elements in a diverse range of environments and across a broad time frame. The architectural and technological specifics of explosives storage has given rise to common design elements in structures across all sites identified. The landscape arrangement and the adaptations for the primary functions of transport and storage also give rise to common elements. Historical comparisons can be primarily drawn from regional sites, however there are a number of sites across the country, which have associations with American forces in World War II, and similar histories of military armaments storage.

Those sites which have been registered on State Inventories and the Australian Heritage Places Inventory have been compared using registration statements, rather than heritage analyses or conservation plans. Such a comparison is necessarily reliant on the accuracy of available documentation and interpretation of very brief descriptions.

Due to the large number of comparative sites uncovered, the analysis will have to be restricted to listing types of sites, some of which can go in more than one category. The full registration documentation is available at the AHPI database at <http://www.heritage.gov.au>.

### **5.4.1. Sites with comparative landscape forms and arrangements, including areas notable for their natural heritage values.**

- False Cape Second World War Defence Facility, Cairns, QLD

The complex landscape exhibits great aesthetic characteristics and local recreational associations, with landmark defence buildings, including magazines, batteries and gun emplacements.

- Queens Domain, Hobart, TAS

Extensive area of Crown Land adjacent to CBD of Hobart which exhibits significant natural features in an area which was reserved for the Hobart powder magazine, constructed in the C19th.

- Woodman Point Natural Area, Cockburn, WA

An area of land which was reserved for explosives storage in 1903, which exhibits rare and endangered species of flora and a landscape which has many rare pre-European characteristics. The retention of bushland and the use of the topography for transport and blast containment are all comparable.

- Bantry Bay Public Magazines, Killarney Heights, NSW

Extensive area within Middle Harbour, which contains significant cultural landscapes and natural areas, reserved from urban development when the magazines were constructed in 1913.

- Snake Creek Armament Depot, Adelaide River, NT

RAN explosives storage area constructed 1943-45. Comparative road and rail network, earthworks, blast barriers and use of topography.

- Point Wilson/Avalon Coastal Area, Lara, VIC

An extensive coastal area with wetland and salt marshes supporting endangered water birds, which has been reserved from development due to the presence of the Commonwealth explosives storage area.

#### **5.4.2. Sites which have comparable significance for Aboriginal people.**

- Bantry Bay Public Magazines, Killarney Heights, NSW

Bantry Bay contains numerous art and occupation sites of great significance to the Aboriginal community of Sydney.

The reference to the assessed level of significance of the Bantry Bay site for Aboriginal heritage does not imply any conclusions about the level of the significance of the Newington site, which is still being researched.

#### **5.4.3. Sites with comparable architectural, engineering, or technological similarities in the design of explosives magazines.**

- Snake Creek Armament Depot, Adelaide River, NT

The site contains numerous explosives storage magazines built in 1943-45. Sixty-nine structures were built, using the natural topography for blast containment, including underground barrel vaulted explosives storehouses comparable to MPHP.

- North Esk Powder Magazine Group, Launceston, TAS

The complex of magazines was constructed between 1860 and 1914. The design of the magazines exhibits concerns with temperature control, fire safety and blast containment and the site demonstrates the evolution of explosives technology over 54 years.

- **Cooktown Powder Magazine, Cooktown, QLD**  
The powder magazine, built 1876, exhibits comparable design features which demonstrate concerns with temperature regulation, blast containment and fire safety, shown in Building 20 of MPHP.
- **Enoggera Magazine Complex, Enoggera, QLD**  
This complex demonstrates unusual blast containment measures with buildings built into natural mounds. The architectural principles of the magazines, cordite stores and laboratories are comparable.
- **Frances Bay Explosives Complex, Darwin, NT**  
The site contains a complex of different magazine types, which were constructed in 1937. The complex includes a mine storage magazine; ten above ground and three earth covered magazines. The design of the magazines is different in its concern to keep excessive temperatures reduced, but the blast containment and fire prevention measures are comparable.
- **Gallipoli Barracks Magazine Complex, Enoggera, QLD**  
The design of the 8 magazine buildings, built post-Federation, demonstrate comparable designs of temperature control, handling and storage, particularly in relation to cordite storage.
- **Jacks Magazine, Maidstone, VIC**  
Built in 1878, the bluestone magazine exhibits a similar construction technique to Building 20 at MPHP. Massive walls, earth mounds, vaulted interiors and non-ferrous detailing.
- **Spectacle Island Explosives Complex, Drummoyne, NSW**  
Built between 1865 and 1914, the explosives storage buildings demonstrate the evolution of magazine design and explosives handling and storage. The later buildings demonstrate a similarity of design and intent to those at MPHP.
- **Wartime Bomb Dumping Buildings, Pialligo, ACT**  
Constructed between 1939-1942 the Bomb Dump buildings are barrel vaulted and earth covered. They exhibit similar construction details as the US magazines at MPHP.
- **Swan Island Defence Precinct, Queenscliff, VIC**  
The precinct contains numerous buildings and structures related to naval defence in Victoria. Within the original 1881 fort was a number of explosives stores, some of a barrel vaulted construction comparable to the US magazines. The complex also contains housing and administrative buildings and a large-scale wooden truss stores for mines.

#### **5.4.4. Sites which exhibit comparable infrastructure design and adaptation for explosives transport and storage.**

- **Swan Island Defence Precinct, Queenscliff, VIC**  
The presence of a 3 inch gauge tramline across the site (now demolished) and the siting of buildings for receipt and delivery via the tramline, gantries and jetties are comparable to MPHP.

- North Esk Powder Magazine Group, Launceston, TAS

An extensive 2 foot gauge tram or light rail system operated on elevated concrete blocks around the site and then down to the jetties for loading and unloading. The trolleys used appear to have been hand-propelled. The site is located on a river, taking advantage of the proximity to the Harbour and shipping, but also sited far enough away from urban development.

- Jacks Magazine, Maidstone, VIC

The utilisation of both river transport and horse drawn tramlines, cut through earth mounds and linking river, road and magazine is comparable.

- Bantry Bay Public Magazines, Killarney Heights, NSW

The infrastructure of the explosives complex includes an extensive hand-propelled light rail network, which links the magazines to the wharves, comparable in extent to the network at MPHP.

#### **5.4.5. Sites with comparable historical significance in demonstrating Australia's role in the Pacific War.**

- Wartime Bomb Dumping Buildings, Pialligo, ACT

The bomb dumps were constructed in 1942, following the attack on Pearl Harbour. The RAAF camouflaged the dumps and magazines to protect them from enemy attack, demonstrating Australia's defence preparedness.

- Frances Bay Explosives Complex, Darwin, NT

Built in 1937 in response to the Japanese build up in the Pacific, the site demonstrates Australia's defence preparations and wartime activities. Used by allied naval and army forces, including the Americans during the Second World War.

- Bantry Bay Public Magazines, Killarney Heights, NSW

The public magazines were taken over by American services personnel for the storage of small arms and explosives during the Pacific War.

- Snake Creek Armament Depot, Adelaide River, NT

Constructed during preparations for defence against Japanese attacks, the site exhibits comparable WWII underground explosives storehouse structures and above ground laboratories, canteens for personnel and magazines.

#### **5.4.6. Sites with American Structures**

Frances Bay Explosives Complex, Darwin, NT

False Cape Second World War Defence Facility, Cairns, QLD

Snake Creek Armament Depot, Adelaide River, NT

**5.4.7. Sites with Regional and Historical Association**

Chowder Bay Barracks Group, Georges Heights, NSW  
Cubbitch Barta National Estate Area, Holsworthy, NSW  
Spectacle Island Explosives Complex, Drummoyne, NSW  
Bantry Bay Public Magazines, Killarney Heights, NSW  
Goat Island, Sydney, NSW

**PART D**

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**Opportunities and  
Constraints**



## 6.0 Obligations and Constraints

### 6.1 Introduction

The MPHP is subject to a number of different statutory requirements and agency management regimes. These impose different legislative and regulatory obligations and constraints upon the future management authority of Parklands. These are detailed below.

The site has been nominated for inclusion on the NSW State Heritage Register. Once registered, conservation of the heritage significance of the site as a totality and of its individual components will be a major imperative for future management.

The heritage significance poses constraints on management but also opens opportunities for interpretation and presentation of the complex layers of ecological and historical development.

The natural and cultural significance of the site also gives rise to the need for conservation principles and practice that are consistent with the requirements of the *Australian Natural Heritage Charter, 2002* and The *Australia ICOMOS Burra Charter, 1999*. These Charters provide guidance for the conservation and management of places of natural and cultural heritage significance respectively. The ANHC was developed under the auspices of the Australian Committee for IUCN and the Australian Heritage Commission, and the Burra Charter was drawn up by the professional members of Australia ICOMOS.

For the historic aspects, the Burra Charter articles are used in the following chapters to set guidelines for the management, conservation, adaptation and interpretation of MPHP. These guidelines will be applied to specific structures, material and landscape in the conservation policies of Part E.

The MPHP is also subject to the Plan of Management for the whole of the Parklands as required under the *Sydney Olympic Park Authority Act, 2001*.

The Newington Nature Reserve component of the precinct is also subject to a Plan of Management prepared to meet the requirements of the *Sydney Olympic Park Authority Act, 2001* and the *National Parks and Wildlife Act, 1974*. The Plan of Management for the Newington Nature Reserve is incorporated into the overall Parklands Plan of Management. It is intended that this CMP will provide an indicative framework for the natural elements of the whole of the precinct as they relate to and are integrated with the historic elements, but that the Parklands PoM which incorporates the Newington Nature Reserve PoM will take precedence where decisions need to be made for management affecting the natural values of significance.

### 6.2 Constraints arising from Statement of Significance

The following constraints arise from a consideration of the heritage values expressed in the Statement of Significance and the Australian Natural Heritage Charter and the Burra Charter

guidelines for the conservation of heritage places. They are constraints and guidelines to determining the limits of acceptable change, whilst retaining cultural significance.

1. Conservation of the complex and layered natural, Aboriginal and Historic cultural significance of the site should be the first priority in the context of new uses.
2. Conservation and interpretation of the site should give equal prominence to both the cultural and natural aspects of the site where this will not result in degradation or loss of significant values.
3. The Aboriginal community and the scientific ecological community should be involved in the use, management and conservation of the woodland areas of the site in consultation with NPWS. The scientific ecological community should also be involved in the use, management and conservation of the wetland and parts of the grassland areas.
4. The site has historically been a progressively evolving place, in response to the operational requirements of its pastoral, industrial and Olympics related activities. These have now finished, and the site should continue to develop its new roles, but in a manner that respects its significance.
5. The historic interpretation of the site should strive to present an integrated set of values, which encourages co-existence of all aspects of cultural significance and all aspects of the evolving history of occupation.
6. The movable heritage items of the site, owned by the Authority - signage, operational fixtures, tools and equipment - should be preserved in-situ unless removal is necessitated by conservation or security concerns.
7. The characteristics of the landscape must be preserved and the areas of woodland and wetland in the Newington Nature Reserve must be recognised, managed and conserved. The Reserve is vested in NSW National Parks and Wildlife Service, who have partially divested responsibility for care, control and management to the Authority under the terms of a Memorandum of Understanding and requiring implementation of the Parklands Plan of Management.
8. Potential new uses requiring building accommodation should first consider the suitability of the available range of accommodation on the site. New buildings should only be constructed if no suitable existing buildings are available and if the new buildings will not adversely affect the visual and ecological character of the site.
9. Potential new uses must be consistent with the Parklands Plan of Management.

### **6.3 Sydney Olympic Park Authority Act, 2001.**

The gazettal of the Sydney Olympic Park Authority Act in 2001 established the Sydney Olympic Park Authority (the Authority) as the relevant management agency for the Sydney Olympic Park of which the MPHP is a component.

This Act covers the formation and functions of the Authority. Clauses 17-27 deal with the Local Government and Environmental Planning functions of the Authority, particularly in relation to any development that the Authority proposes to carry out. The Act provides that the Minister for Infrastructure, Planning and Natural Resources is the consent authority for Sydney Olympic Park.

In reference to heritage, a function of the Authority is to:

13(c) to protect and enhance the natural and cultural heritage of Sydney Olympic Park, particularly Millennium Parklands.

The Authority is required under the Act to produce a Plan of Management for the Parklands, which includes the MPHP and to guide operational and future use of the site. The Act also allows for the Plan of Management to incorporate a Plan of Management (prepared under Part 5 of the NPWS Act) for the Newington Nature Reserve, which is a component of the MPHP.

The Act also includes specific requirements for the MPHP in S.34 (6):

The Authority must ensure that the plan of management includes, after consultation with the Director-General of National Parks and Wildlife, a proposal that land adjoining the Newington Nature Reserve is to be managed as a buffer to that reserve.

and S.30(5):

In order to assist the making of future additions of land to the Newington Nature Reserve, the Authority must manage the lands adjoining the Reserve in sympathy with the Reserve.

The Parklands Plan of Management references this CMP and states that upon its endorsement by the NSW Heritage Council the CMP will be a principal informant of the management of the built historical elements and the landscape of the MPHP.

The Act establishes a management structure for the Parklands. The Act requires that the Board of the Authority must establish an Advisory Committee for the Parklands. That Advisory Committee can make recommendations to the Board with respect to care, control and management of the Parklands. That Advisory Committee has been established.

The Act provides for a balance between ecological and cultural management, and guides the Authority to ensure that ecological sustainability is a primary goal in works and actions carried out by the Authority on its lands.

## **6.4 National Agencies**

### **6.4.1 Australian Heritage Commission**

The Australian Heritage Commission recognised the MPHP as an important and significant component of Australia's cultural and natural resources, by entering it on the Register of the National Estate at the time when it was still an operational Defence facility. The listing is in

two separate registrations, historic and natural, and covers the entire site including areas to the south of Holker Street within Newington Village. Item 006544, *Silverwater Saltmarsh*, is classed as Natural and item 015054, *Newington Arms Depot Conservation Area*, is classed as Historic.

While entry on the register of the National Estate does not entail formal or legislative requirements for the planning and management of the site for *non-Commonwealth* agencies, it does provide important national recognition of the site. Registration with the Australian Heritage Commission does entail an informal notification requirement should management and conservation decisions affect the values of the site.

The National Estate listing was gazetted on the 14<sup>th</sup> May 1991, prior to the development of the site for the Olympic Village (now the suburb of Newington). The registration entry includes numerous items, which are no longer extant, and boundaries, which have been significantly altered. The Authority has notified the AHC of changes and developments on the site since the registration, and this notification process should continue. It is recommended that a copy of this report be forwarded to the AHC with the State Heritage Register entry and a plan outlining the new site boundaries.

#### **6.4.2 Environment Australia**

Environment Australia is the Commonwealth Agency for the implementation of the *Environment Protection and Biodiversity Conservation Act, 1999* (EPBC Act) as it applies to the relevant components of the MPHP's flora and fauna, including such species as the migratory waders, woodland and Green and Golden Bell Frog.

### **6.5 Relevant State Legislation and Agencies**

#### **6.5.1 Heritage Act 1977 and NSW Heritage Council**

Pursuant to the *Heritage Act, 1977* the site has been nominated for entry onto the State Heritage Register. This recognises the site as being of State significance and protected under the *Heritage Act, 1977*.

In agreement with the Sydney Olympic Park Authority, the NPWS and the NSW Heritage Council, the site will be managed in accordance with this CMP. Any proposal, which may affect the significance of the site and which falls outside the policies, guidelines and exemptions contained within the CMP or future conservation management plans, must be referred to the NSW Heritage Council for approval under the provisions of the *Heritage Act, 1977*.

#### **6.5.2 National Parks and Wildlife Act 1974 and NSW National Parks and Wildlife Service**

The woodland and wetland areas of MPHP were gazetted in September 2000, as the Silverwater Nature Reserve (the name was changed later to the Newington Nature Reserve with passage of the SOPA Act). Management and coordination of the Reserve has been partially devolved through a Memorandum of Understanding to the Authority by the NPWS,

to be managed in accordance with the Parklands Plan of Management, which incorporates a Plan of Management for the Newington Nature Reserve.

The Newington Nature Reserve gazettal recognises the ecosystems of MPHP and places an additional set of management and statutory requirements over the gazetted land.

During preparation of the Plan of Management for the Newington Nature Reserve (which is a component of the Parklands Plan of Management), the Authority liaised with the NPWS to ensure that the cultural values and interpretation potential of those cultural values were incorporated into the Plan of Management.

The stone artefacts recorded within the woodland are registered as individual Aboriginal sites with the Registrar of Aboriginal Sites, NPWS. The *National Parks and Wildlife Act 1974* provides statutory protection for all Aboriginal objects whether or not they have been formally identified and/or registered with the NPWS.

The NPWS also has a wider role in the implementation of the *Threatened Species Conservation Act, 1995* as it applies to the MPHP and the wider Parklands.

### **6.5.3 Environmental Planning and Assessment Act, 1979, the Minister for Infrastructure, Planning and Natural Resources**

The *Environmental Planning and Assessment Act, 1979* (EP&A Act) provides for the preparation of environmental planning instruments intended to guide land use and management at State, regional and local levels. The EP&A Act contains provisions for making and determining development applications. The main features of the EP&A Act with relevance to cultural heritage are the requirement for environmental assessment of development proposals and a mechanism for the inclusion of heritage conservation provisions in planning instruments.

Sydney Regional Environmental Plan No. 24 (Amendment No.2) (SREP 24) is a planning instrument made under the EP&A Act. It applies to most of Sydney Olympic Park including the MPHP. The MPHP site is listed as a heritage item in SREP 24.

SREP 24 also establishes objectives and mechanisms for the integrated management of the natural and cultural values of the precinct.

The Minister for Infrastructure, Planning and Natural Resources is the consent authority for any Development Application in the MPHP. When assessing a Development Application on the site the Department of Infrastructure, Planning and Natural Resources (on behalf of the Minister) will seek the advice of the NSW Heritage Office.

SREP 24 also identifies exempt development, that is, development that does not require the consent. Exempt development under SREP 24 with the MPHP is required to be consistent with a CMP adopted by the Heritage Council.

Exempt development under SREP 24, as applicable, is summarised below:

- Minor building alterations and additions to and uses of items of environmental heritage provided that the development does not impact on the heritage significance of the building, structure or landscape;
- Minor maintenance, repairs, painting, excavation, and restoration works to items of environmental heritage;
- Minor landscaping and installation of fittings in the public domain including paving, gardening, planting and the like;
- Temporary uses, buildings and structures (being for a period of two months or less) associated with festivals, minor events, markets and the like;
- Signage for the purposes of event promotions, and directional and identification signage; and
- Amenities, facilities and support infrastructure.

State Environmental Planning Policy No. 4 – Development without Consent (Amendment No. 15)(SEPP 4) is another instrument made under the EP&A Act. SEPP 4 also contains filming as exempt development. Under SEPP 4 filming can only be carried out in MPHP if it does not involve:

- changes or additions that are not merely superficial and temporary;
- mounting or fixing of any object or article on any heritage item;
- the movement or parking of any vehicle or equipment on areas not designed for that use; and
- any permanent changes to vegetation or other natural or physical features of the item.

SEPP 4 also permits minor developments, public utility undertakings and development in the Newington Nature Reserve to be undertaken without development consent.

#### **6.5.4 Threatened Species Conservation Act 1995**

The *Threatened Species Conservation Act 1995* aims to conserve threatened species, populations, ecological communities and their habitats; to promote their recovery and manage the processes that threaten or endanger them.

A Scientific Committee has been established under this Act, which reviews nominations for the listing of species, ecological communities, critical habitat and threatening processes under the TSCA. Threatened species, including flora and fauna, may be listed under Schedules 1

and 2 of the Act, and those plant communities considered to be at risk of extinction as “endangered ecological communities” under Schedule 3.

Sydney Turpentine Ironbark Forest, Green and Golden Bell Frog, bats and saltmarsh listed under this Act are found across the Precinct, both within and outside the Newington Nature Reserve, and must be managed in accordance with the provisions of this Act.

### **6.5.5 Noxious Weeds Act 1993**

The *Noxious Weeds Act 1993* declares noxious plants in four categories – W1 to W4. Weeds are classified as a local government area basis. Sydney Olympic Park is under Auburn Local Government Area. Noxious plants are categorised according to the specific action required to control them.

The objects of this Act are as follows:

- to identify noxious weeds in respect of which particular control measures need to be taken;
- to specify those control measures
- to specify the duties of public and private land holders as to the control of those noxious weeds; and
- to provide a framework for the Statewide control of those noxious weeds by the Minister and local control authorities.

The Act requires that private occupiers of land must control noxious weeds on the land and that a public authority must control noxious weeds likely to spread.

If noxious weeds are found within the Precinct, such weeds will be controlled and managed under this Act.

## **6.6 Community**

### **6.6.1 Aboriginal Community**

The NPWS has registered several Aboriginal flaked stone artefacts within the woodland area of MPHP, as Aboriginal sites. The presence of these artefacts, particularly given their survival in the generally highly modified landscape of Homebush Bay, may be of significance to Aboriginal cultural and administrative organisations whose boundaries cover the MPHP. However, this will need to be established through an Aboriginal Cultural Heritage Assessment for the MPHP in general and the woodland in particular. The Plan of Management for the Newington Nature Reserve (identified as Wanngal Wetland and Wanngal Woodland) defines the management of these parts of the MPHP and the process in regard to consultation with Aboriginal community groups.

The following recommendations are guidelines to determining management protocols whilst retaining cultural significance. These have been formulated with reference to the principles contained in the *NPWS Aboriginal Cultural Heritage Guidelines and Standards Kit (1997)*.



- The relevant Aboriginal community group will be consulted on MPHP woodland and wetland management.
- The management, conservation and analysis of the MPHP must at all times recognise that Aboriginal culture is living and unique and that Aboriginal people have a right to protect, promote and preserve their culture.
- Joint and equitable management of Aboriginal sites must be maintained with Aboriginal participation in decision-making processes.
- The registration of the stone artefacts does not mean that they are the only Aboriginal sites extant within the site, which imposes obligations or constraints in relation to the Aboriginal community. The archaeological surveys conducted so far have been surface survey examinations only and the results of a future archaeological study may identify other sites within the Parklands.

The Sydney Olympic Park Authority launched an Aboriginal History & Connections Program in 2002. The role of the Program is to investigate and document Aboriginal cultural and historical connections to the Sydney Olympic Park area. This includes an assessment of Aboriginal cultural heritage in the MPHP, and the formation of an Aboriginal consultative process to discuss the long term conservation and presentation of that heritage within the Sydney Olympic Parklands.

The program follows the consultative guidelines outlined in the *NPWS Aboriginal Cultural Heritage Guidelines and Standards Kit (1997)*, and is currently establishing a long-term Aboriginal consultative network comprising representatives of Aboriginal cultural and administrative organisations with an interest in the Sydney Olympic Park area. Utilisation of this network, as well as the information gathered by the Program, is likely to meet the consultative aims stated above, and any additional assessment of Aboriginal cultural heritage significance to be undertaken for the MPHP.

### **6.6.2 Local Historical Societies and Defence Heritage groups**

This report has not identified any specific groups, which may have a strong interest in the site. However, there has been some interest in the site and strong feelings of attachment on the behalf of former employees and other naval staff, which should be taken into consideration in the management and future use of the site and more particularly when identifying human resources for the interpretation of the Armament Depot history.

### **6.6.3 National Trust of Australia (NSW)**

The site was classified by the National Trust of Australia (NSW) on the 5<sup>th</sup> November 1984. The National Trust of Australia (NSW) is a community-based organisation, which holds no legal role over the places, which it has assessed and classified.

The Trust's classification documentation was taken from the RNE listing and is similarly out of date and lacking information on the new boundaries and recent redevelopment. The Trust should be kept notified of all changes to the site and it is recommended that a copy of this

report be forwarded to the Trust with the State Heritage Register entry and a plan outlining the new site boundaries.

#### **6.6.4 Environmental and Scientific Interest Groups**

The NSW Field Ornithologists Club and Birds Australia have participated in a number of surveys of bird species and numbers in the MPHP. Many members of the scientific community have also conducted research surveys.

The National Parks Association, the National Trust and the Total Environment Centre have a longstanding interest in the Precinct.

It is assumed that a number of other community groups would be interested in the natural areas and flora and fauna of the site, especially once ecological programs are opened to the public. While this report has not specifically identified these groups and there are no obligations in regard to community groups, it should be kept in mind in any future planning and consultation for the natural landscape areas.

#### **6.6.5. Australia ICOMOS**

Australia ICOMOS is the National Committee of the International Council of Monuments and Sites.

Its publication, *The Burra Charter*, has become the agreed professional practice standard for the methodologies and philosophical approaches to cultural heritage conservation work in Australia. Its status is advisory not statutory, however, most public sector cultural heritage conservation work complies with the principles and guidelines of the Charter.

ICOMOS has also formulated the *International Cultural Tourism Charter*, adopted in 1999. This document seeks to foster cooperation between conservation practitioners and the tourism industry. It promotes the concept that one of the primary reasons for undertaking any form of conservation is to make the significance of the place or item accessible to the visitor. This accessibility can be through well managed physical and/or other means, including both intellectual and emotive. The Charter also recognises the need to restrict access to sensitive locations and the rights of indigenous custodians to determine the nature of access that may be made available to places or practices of particular cultural heritage.

#### **6.6.6 Educational Community**

The Department of Education and Training have introduced a mandatory environmental education policy for schools in 2001. The Department is interested in establishing an environmental education centre within the Parklands. The Authority has the ability to participate in and enhance this program.

A range of education institutions and agencies also provide technical advice and policy expertise.

## 7.0 Management Principles

### 7.1 Introduction

The *Burra Charter* provides two articles, which deal with the management of places of cultural significance. These two articles have informed the discussion below and the conservation policies outlined in **Chapter 13**.

#### *Article 5*

*Conservation of a place should identify and take into consideration all aspects of cultural and natural significance without unwarranted emphasis on any one value at the expense of others.*

#### *Article 6*

6.1 *The cultural significance of a place and other issues affecting its future are best understood by a sequence of collecting and analysing information before making decisions. Understanding cultural significance comes first, then development of policy and finally management of the place in accordance with the policy.*

6.2 *The policy for managing a place must be based on an understanding of its cultural significance.*

6.3 *Policy development should also include consideration of other factors affecting the future of a place such as the owner's needs, resources, external constraints and its physical condition.*

#### *Article 13*

*Co-existence of cultural values should be recognised, respected and encouraged, especially in cases where they conflict.*

The Australian Natural Heritage Charter (2<sup>nd</sup> Edition 2002) also contains the following articles which have informed the discussion below and the conservation policies set out in this CMP.

#### *Article 2*

*The basis for conservation is the assessment of the natural and significance of a place, usually presented as a statement of significance.*

#### *Article 8*

*The conservation policy for a place should be determined by a clear understanding of natural significance and other management issues. These should be used to determine the desired conservation outcomes and future condition for the place.*

**Article 9**

*The conservation policy should determine uses that are compatible with the natural significance of a place. Uses that will degrade the natural significance should not be introduced or continued.*

**Article 10**

*The conservation policy should consider ecological processes and other processes that extend beyond the stated boundaries of a place, and their level of impact or influence on the natural significance of the place.*

**Article 7**

*Conservation of a place should take into consideration all aspects of its natural significance, and respect aspects of cultural significance that occur there.*

## **7.2 A New Direction for the Precinct**

The MPHP is in the process of transformation from its role as an operational defence facility to a component of the Parklands. With this new role, the natural and cultural significance of the place will be the focus of conservation, education research, interpretation and public access programs. These programs will include a non-faculty centre for learning (including formal education), arts and cultural facilities for exhibition, public performance, heritage tours and so on, environmental research facilities and passive recreation opportunities.

One of the key aspects of this integration is the close link between the conservation of the values and the communication of those values in a complementary fashion. There will be continuing development of programs related to the natural and cultural values of the precinct as this new management direction is implemented. The principle is that this will take place in a manner, which respects and conserves the values from which it is growing.

In this context, the critical principle is one of managing change, in a dynamic process that will integrate what was formerly a closed and isolated facility into a component of a larger public parkland. As part of this process a number of important management issues must be dealt with as outlined below.

## **7.3 Managing Competing and Complementary Values**

The analysis of significance of the MPHP has revealed that there are layers of natural and cultural values. The two nationally recognised professional Charters for the management of these values are the *Burra Charter* and the *Australian Natural Heritage Charter*. Each of these Charters recognises the existence of the values referred to by the other. Consequently, all management practices developed for the Precinct need to recognise the co-existence of these values.

In managing the site, all the relevant agencies and stakeholders need to recognise the complementary and at times competing nature of these values in order to achieve a result that

does not place undue emphasis on one at the expense of degrading the significant values of the other.

#### **7.4 Co-operative Managed Access**

The MPHP encompasses a number of different heritage values and resources. These resources must be shared by a number of different agencies and community groups. The gazettal of the wetland and woodland as Newington Nature Reserve and the future registration of the site on the State Heritage Register has created the potential for competition over natural and cultural values and the related legislative and management obligations which must be very carefully managed by the Authority.

The Plan of Management for the Parklands provides for a co-operative approach, which acknowledges the different stakeholders across the site, and the differing approaches that they have to the significance of the site.

MPHP has operated through most of its history as a high-security installation. This highly managed access, along with the operational nature of explosives work, which required close management of buildings and landscape, has protected and preserved the site and indeed is part of its historic significance. The high level of management in the past has meant that endangered and rare ecosystems and habitats and a unique cultural landscape have been conserved.

The complexity, fragility, spiritual significance and dangerous nature of parts of the site will mean that public access may have to be restricted at different times. In these situations interpretation can provide a means of ensuring public access to meaning and significance if not to the physical resource. The management regime of MPHP should recognise that different natural and cultural heritage values will require different management systems or practices, levels of security, access and conservation.

#### **7.5 Revising existing Agency listings**

In order to manage properly the significant heritage values of MPHP it is absolutely vital that there is concurrence about those values between agencies.

Old listings covered the totality of the former RAN Armament Depot, the southern section of which was excised for the development of the Olympic Village and parts of the Parklands and need to be revised. The extent of the precinct has been physically defined within SREP 24 and the Parklands Plan of Management and this should act as the guide for all other agencies. [It should be noted however that Sydney Olympic Park Authority is currently seeking from a realignment of the north-western corner of the MPHP (as defined under SREP 24) to reflect the correct historical alignment of the Precinct. As it currently stands the western boundary follows the alignment of Jamieson Street and includes a part of what was previously known as Auburn Hardies, a remediated landfill site. When this alignment is approved all relevant agencies and groups will be advised.]

The site is listed on numerous heritage registers and some of these are inaccurate, outdated, incomplete or impartial representations of the complex significance of the site. The National

Trust of Australia (NSW) and the *Register of the National Estate*, all have current registration which record non-existent structures and boundaries.

The Authority should use its best endeavours to ensure that all interested Agencies adopt the same comprehensive listing material as the basis for their involvement and that each recognises both the natural and cultural values of the precinct.

## 8.0 Conserving the Cultural Resource

### 8.1 Introduction

Conservation of the cultural resource aims to retain and preserve the significance of MPHP, both its fabric and its meaning. With this in mind, the following articles from the *Burra Charter* have special relevance to the MPHP and will guide the general discussion about conserving the historic landscape, structures, movable items and infrastructure of the site. The strategy for conservation as set out in the Plan of Management as it relates the MPHP is also relevant to the discussion set out below.

#### **Article 5.1**

*Conservation of a place should identify and take into consideration all aspects of cultural and natural significance without unwarranted emphasis on any one value at the expense of others.*

#### **Article 8**

*Conservation requires the retention of an appropriate visual setting and other relationships that contribute to the cultural significance of the place. New construction, demolition, intrusions or other changes, which would adversely affect the setting or relationships, are not appropriate.*

#### **Article 10**

*Contents, fixtures and objects, which contribute to the cultural significance of a place, should be retained at that place. Their removal is unacceptable unless it is: the sole means of ensuring their security and preservation; on a temporary basis for treatment or exhibition; for cultural reasons; for health and safety; or to protect the place. Such contents, fixtures and objects should be returned where circumstances permit and it is culturally appropriate.*

#### **Article 14**

*Conservation may, according to circumstance, include the processes of: retention or reintroduction of a use; retention of associations and meanings; maintenance, preservation, restoration, reconstruction, adaptation and interpretation; and will commonly include a combination of more than one of these.*

#### **Article 15.1**

*Change may be necessary to retain cultural significance, but is undesirable where it reduces cultural significance. The amount of change to a place should be guided by the cultural significance of the place and its appropriate interpretation.*

#### **Article 15.3**

*Demolition of significant fabric of a place is generally not acceptable. However, in some cases minor demolition may be appropriate as part of conservation. Removed significant fabric should be reinstated when circumstances permit.*



**Article 16**

*Maintenance is fundamental to conservation and should be undertaken where fabric is of cultural significance and its maintenance is necessary to retain that cultural significance.*

**Article 23**

*Continuing, modifying or reinstating a significant use may be appropriate and preferred forms of conservation.*

## **8.2 Conserving an Integrated Landscape**

The landscape of MPHP is highly significant. It informs the history of Aboriginal dispossession, early pastoralism, the development of the Armament Depot, the history of the development of defence in Sydney, and the changing uses of the Parramatta River. The operational nature of the Armament Depot was integral to the formation and preservation of landscape and buildings. This integrated history of landscape and structures must be recognised as containing cultural and natural values of equal significance.

The three different landscape types; grasslands, wetland and woodland will require different land management regimes which must take into account the cultural significance of each. A key factor in the conservation of significance will be appreciation and respect of the integrated nature of the various structures contained within each landscape type.

## **8.3 Conserving the Landscape Character**

MPHP is recognised by all its stakeholders as a rare and special environment in which to work and visit. The unique setting of woodland, wetland and grasslands by the river, in an otherwise densely urban and industrial suburb, is a strong factor in the site's social and aesthetic significance. This visual setting and the relationship of the site, including the Newington Nature Reserve, to the Narrawang Wetland, the Brickpit and to Badu Mangroves adds to the significance.

The landscape setting has three quite different characters requiring different management and conservation regimes. The management and conservation of the natural and ecological values of the landscape character must be consistent with the Parklands Plan of Management. The open grassland of the Holker-Jamieson Street area has views to the south, west and east and vegetation dominated by mown grass with scattered trees, reflecting its historic nature as a former Armament Depot. Limited Screen plantings have been located adjacent to the Holker and Jamieson Street boundaries. The Jamieson Street area has a number of administration buildings and has close views to Silverwater Prison. The wharf area has an industrial and maritime character and visually pleasing views up the river and of mangroves on the opposite shore. The two cranes are a strong visual characteristic of the river frontage and markers of the industrial processes. Across the southern section, it is an open landscape with explosives storehouses protected by earth berms, and views to the south blocked by the high walls of Holker Street.

The woodland, a remnant of the ecological communities that once covered the Cumberland Plain, was carefully managed in the time of the RANAD Depot to ensure that there was no adverse fire threat to the explosives warehouses and other structures. Its dominant landscape character now is natural woodland and once inside it, there is a sense of isolation. There are a few storehouses and workshops, which surround it and a single storehouse in the middle. There is a narrow corridor of land between it and the Casuarina forest, with a variety of building types, a road and light rail track. The presence of several Aboriginal stone artefacts within this area adds to the character of the woodland landscape.

The wetland is dominated by Grey Mangroves and saltmarsh. It also contains a shallow open water and is partly edged by a five hectare *Allocasuarina* closed forest. The mangroves and Casuarina forest close off the other areas of saltwater ponds and marsh. The wetland contains Building 16.

#### **8.4 Conserving Buildings and Infrastructure**

The MPHP evolved over a 100-year operation as an Armament Depot, with the attendant buildings and infrastructure that was closely integrated with the topography and landscape. It arose from the need to address a highly specific use requirement and developed in response to technological changes. This has given rise to a building collection, which is highly repetitive in fabric, function and form. The siting of buildings exhibits clear patterns of association, operational function and the available land at various stages of the Depot's development.

The built structures need to be conserved with an eye to their significance as a collective resource within a landscape. This means that conservation of the fabric must take into account the landscape setting and functional relationships between buildings and site infrastructure. The re-use and adaptation of the buildings needs to take into account the retention of the meanings and associations with other structures, infrastructure and landscape elements as well as the interpretive potential of each building.

It is important to recognise that many different types of buildings were integral to the operation of the Depot. While some buildings have more apparent appeal or architectural value, it is important to recognise the totality of the contribution to the overall system. Demolition of some structures in MPHP may be deemed necessary for reasons of safety and health, but demolition of structures which are deemed to have little re-use or architectural value is not acceptable, as they still contribute to the totality of the cultural landscape. Demolition or removal of structures, which may change historical relationships between buildings of different periods, is also not acceptable.

Maintenance, which preserves the significance of fabric, should be undertaken and a maintenance regime ought to be prepared and resourced for all significant fabric.

#### **8.5 Conserving the Transportation Infrastructure**

One of the primary functions of the Armament Depot was the transportation or transshipment of explosives from the ships in the Harbour or from Kingswood Explosives Depot. The explosive ordnance arrived at MPHP by either truck or concrete lighter and then would be

moved around the Depot for testing or for storage. Whilst in storage they were transported round the site for quality testing, destruction or proofing on the light rail system.

Transportation was therefore a vital element in the industrial process of the Armament Depot, and due to the high risk involved, a very specialised system developed. Armament depots in other states, and throughout NSW show similar concerns with transportation systems and risk reduction during transport. Although light rail systems are a common feature, MPHP has one of the most intact and best preserved examples. The best method of conserving the light rail system is to ensure continuity of use. In this way the fabric of the track is maintained and interpretation of function is achieved, as well as providing a unique, attractive, controlled and appropriate means of transporting visitors.

The light rail transport system, roads, pathways, tracks and wharf are vital interpretive elements of the site. They demonstrate the historical development of the Armament Depot and in the original establishment precinct, the previous incarnation of the site as urban subdivision. The historical road names should be retained.

## **8.6 Conserving Movable Heritage**

Movable heritage is defined as any natural or manufactured object or collection of objects of heritage significance. Movable heritage items and collections are protected under the *NSW Heritage Amendment Act (1998)*, which allowed the listing of movable items of State significance in the State Heritage Register. This listing could be in the form of a separate listing or as part of the listing of a heritage place. The movable items identified as associated with buildings at MPHP have been included in the State Heritage Register as part of the fabric of the place, and an important element of the significance of the site.

The movable heritage of MPHP consists of items, which belong to the Authority, and other items on loan from Spectacle Island Museum. Those items, which belong to the Authority, consist mainly of fabric associated with buildings. The retention of movable heritage in-situ with the buildings enhances the significance of both. The types of movable items identified on the site range from signage, tools and benches to equipment such as gantry cranes and incidental items such as fire safety equipment to light rail trolleys and engines and possibly the wharf cranes. Most items could be used to great effect in interpreting the functions and uses of buildings, adding significantly to their visual character.

The NSW Heritage Office and the Ministry of Arts have developed a joint policy called the *Movable Heritage Principles*. These ten principles aim to assist government and community organisations to manage their collections and develop appropriate conservation policies. These heritage principles will inform the conservation policies.

## 9.0 Adapting the Cultural Resource

### 9.1 Background

For the purposes of this CMP the term “adaptation” is taken to be that defined under the *Burra Charter*, as follows:

Adaptation means modifying a place to suit the existing use or a proposed use.

The parallel term under the *Australian Natural Heritage Charter* is “modification”.

In the past heritage considerations have often been seen as too restrictive or protective in Australia, with historic buildings being regarded as so precious that they could only be used for museums, or for a continuation of their former uses. This attitude has matured, with the introduction of reasonable and responsible new uses now regarded as a preferred option, particularly where the original use has no potential for revival. Uses that relate relatively closely to the original are given preference, as these are considered to require the least amount of change to the building and therefore to pose the least potential impact on the character and significance of the existing building or place.

The opportunities for re-use of heritage properties are now even greater, as is the ability to accept that new uses can be adapted to suit the character and spaces of existing buildings, rather than demanding unnecessary changes to the building fabric to suit the new use.

The complex of buildings, site works and other structures at MPHP were erected and progressively developed for a specific purpose, the safe storage and handling of explosives armaments. Specific buildings were purpose designed to suit their particular functional role. Others, such as administration, staff amenity and stores buildings were of a more general nature. This use has now ceased and will not be revived on this site. During its century of operational life, the Armament Depot was a secure precinct, closed to the public and managed under a strict set of safety and operational procedures. The various components of the landscape were also managed to minimise any risk to the safety of the stored armaments.

Since the closure of the northern section of the Armament Depot the site was managed by OCA and subsequently the Authority. There has been a continuation of security measures with managed access for staff and visitors. The site is now fenced to protect the large collection of historic buildings, equipment and other items from vandalism and theft.

The overall site now presents a remarkable range of opportunities for re-use and adaptation in a manner that will both interpret its layered historical significance and complement the activities that are authorised and developed within the Parklands Plan of Management.

### 9.2 The Concept of a Shared Resource

The detailed formulation of re-use concepts for the MPHP will be formulated over a period of time and will involve a number of interested parties. Of particular importance is that the site be conserved, re-used and developed as a Shared Resource.

It is essential that various sections of the site are not divided off for the exclusive occupancy of a particular interest group and developed without consideration of the nature of the place and its re-use opportunities. While individual buildings may be licensed, leased or otherwise contracted for specific purposes or by specific user groups, no actual components of the overall place should be isolated from the whole in terms of the ability of people to move around the place, in a well managed way.

The complex layers of significance of the site have meaning and importance to both the Indigenous and non-Indigenous communities. From an understanding of this complexity as a shared resource comes the concept for a shared approach to conservation, use and management. Shared resources may include components of the overall landscape, means of access, particular buildings or facilities that have been adapted for new uses, management structures, promotional, research, education, interpretation and visitor management programs.

A key feature of the nation in the 21st century will be the manner in which, as a community, Australians recognise that the country is itself a multi-faceted resource that has been used and shared by both Indigenous and non-Indigenous people. The future conservation, re-use and development of the MPHP has the potential to demonstrate, at quite a reasonable scale, the essence of this sharing of resources and of a respect for the rights and interests of all communities, both human and ecological as the nation moves forward.

A combination of interested parties will have the opportunity to work together in a cooperative manner towards the shared future for the precinct and its place within the larger context of Sydney Olympic Park. These parties include representatives from the Metropolitan Aboriginal Land Council, Sydney Olympic Park Authority, NSW Heritage Council, NPWS and others.

### **9.3 Selection of Appropriate New Uses**

The existing buildings and other structures represent opportunities for both re-use and interpretation. It is essential that representative examples of buildings of various types and ages be retained for interpretative purposes, to explain and illustrate their place within and contribution to the operational nature of the former Armament Depot.

Future conservation and re-use activities must also take into account the complex layered significance of the site and not place undue emphasis on any particular layer or characteristic of significance at the expense of others. Decisions about the interpretative capacity and re-use potential of individual buildings, structures and other features must take account of their particular and relative contribution to the overall significance of the place and its evolutionary development.

Selection of appropriate uses must also be consistent with Parklands 2020 and the Parklands Plan of Management. In particular appropriate building uses and activities are identified in the Plan of Management.

#### **9.4 Re-use before the Development of New Buildings**

Conservation of the extant building stock and other structures on the MPHP will provide extensive floor space within a wide variety of buildings for re-use. These are scattered across a large landscape but located within relatively well-defined groups. While many of the buildings were purpose designed and will need to be sensitively adapted, the floor space available will be suitable for a range of re-use possibilities.

Given that the current nature of the site is defined by the interaction of natural and cultural landscapes with the buildings and other site works, it is essential that new uses be first tested against the existing buildings before any consideration is given to the construction of new facilities.

#### **9.5 Location of New Buildings**

There are very few areas on the site where new buildings can be readily developed without becoming a potential visual intrusion into the historic landscape relationships and the progressively evolved nature of the site.

While some of the identified precincts have seen the construction of a range of buildings from most of the operational periods of the Depot, others have changed very little. The overall site is characterised by either groups of relatively small administrative buildings on the central open lands and western slopes of site, or by groups of specialised testing laboratories and armaments storehouses carefully sited and enclosed with protective earthworks or blast barriers. The functional and operational criteria that determined the site's evolution, strongly influenced by topography and landscape, are thus readily apparent and remain as a strong factor in the character of the precinct.

The historical utilisation of the high ground along the Jamieson Street frontage in the latter years of the Depot operation for the construction of new or temporary support buildings provides the best lead for the location of new buildings, should these be required to support the future development of the precinct. **Section 14.3** also identifies other locations within the MPHP where new buildings would be appropriate.

New buildings must always respect the enclosed, secure nature of the place and address themselves to the precinct, not to the surrounding streets.

#### **9.6 Managed Site Access**

Public access to the MPHP site was generally restricted, due to the operational nature of the base and its Defence status. Security was maintained in a vigorous manner and the site was fenced.

It is important that the secure nature of the place be maintained, albeit to an appropriate level, if the valuable collection of buildings, equipment and artefacts (as well as the habitat and wildlife refuge values) are to be protected. The Plan of Management sets out public access restrictions for the Precinct. The levels of public access have been based on an analysis of values and the safety of visitors.

A chain wire fence has been erected along the river frontage, to separate pedestrians using the newly constructed riverside walkway from entering the site. The gazetted woodland and wetland have also been fenced to facilitate protection and internal management of their ecological values.

Traditionally there were only two points of land based access to the overall site, that off Jamieson Street being the only one that survives following the construction of the Olympic Village (now the suburb of Newington) on the southern portion of the former Depot. The majority of armament supplies were transported by water, arriving at the Parramatta River wharf. With the development of the Parklands and Sydney Olympic Park, access to the site and between the various attractions may require new entry points or the new use of existing points. In particular, it is likely that a new entry point on the south eastern corner of the site may be opened to provide access to major parking and public transport facilities. The wharf may also be re-used for access by people from either private or public river craft.

Managed site access must also be consistent with the Parklands Plan of Management which sets out a comprehensive management regime for the Precinct based on an analysis of risks, obligations and constraints associated with the site. In particular the PoM outlines Public Access Arrangements.

## **9.7 On-site Movement and Access**

The MPHP site is a very large overall precinct, containing a variety of landscape types and many buildings and much valuable equipment. It is preferable that members of the public move around and appreciate the site in a manner that protects its significance. Private motor vehicles and visiting buses should only be allowed to move around the site using carefully managed criteria.

Movement around the Armament Depot was traditionally via either the network of roads, pathways or with the internal light rail system. Both are extensive and serve all accessible parts of the site. The nature of the access around the site was determined partly by the functional location and separation of buildings, partly by the topography and partly by the remnant landscape.

Given the extensive network of internal roads, it is preferable that they continue to provide the primary means of vehicle and pedestrian circulation. New roads should only be constructed after careful consideration of the capacity of existing roads to service the identified requirements.

Visitor movement around the site was always carefully controlled and managed during the operational life of the Armament Depot. The need to maintain security was a paramount concern. The bulk of the site, apart from that part comprising the Newington Nature Reserve, should be available for casual recreation (subject to the management regime set out in the Parklands Plan of Management). The majority of visitors, particularly in the early years of development, should be transported or guided around the site, or to specific parts of the site for research, educational or interpretative activities.

The light rail is no longer required for the movement of armaments or other equipment, but it remains a major feature of the site and one that should not be ignored in future visitor management programs. An opportunity exists for the rail system to be re-used and extended for transporting visitors to many areas of the site, thus avoiding undue pressure on the internal road network. The surviving rolling stock should not be altered to suit passenger accommodation, as this will reduce its historical significance and interpretative capacity. The introduction of new, suitably designed rolling stock for transporting visitors is the preferred approach.

An opportunity also exists to connect the two sections of the light rail system that terminate along the eastern boundary of the site to form a loop, to extend the rail system along the foreshore of the Parramatta River and to the Jamieson Street street entry that would facilitate visitor movement around the site. These extensions are acceptable as they extend the functional nature of the rail system into a new phase and do not require major site works that may detract from the character of the landscape in these sectors.

On site Movement and Access must also be consistent with the management regime set out in the Parklands Plan of Management.

## **9.8 “Catch-Up” Maintenance**

The condition of the buildings and general site infrastructure is such that a sequence of “Catch-Up” maintenance works were required in the short term (following transfer to SOPA) in order to stabilise the building fabric and retard further deterioration, providing a basis for conserving the buildings into the longer term.

In 2001 and early 2002, an initial conservation maintenance program was carried out by the Authority in direct consultation with Graham Brooks and Associates. This maintenance program sought to rectify urgent Occupational Health and Safety problems, reverse the effects of an extended period of deferred maintenance and repair the fabric considered most at risk. An itemised list of maintenance carried out during this program is included in **Section 22.1**.

The short-term approach towards the conservation management and maintenance of the buildings and site should be “to do as little as possible, but everything that is necessary”, to stabilise and conserve the complex into the future. This will enable options for re-use to be retained, while limiting the expenditure required to a minimum.

A related issue as part of the maintenance environment is the need to prepare the site for the initial program of public access. Many of the buildings are fitted with compressed asbestos roofing, gutters and downpipes. Some have wall, ceiling or soffit sheeting of the same material. This material represents a hazard to both visitors and site staff, however the cost of replacement is unsustainable.

In accordance with relevant Australian Standards, an initial program of maintenance was implemented, in 2001, to respond to the presence of asbestos material on many of the buildings. In general, stable material that remained in reasonable condition was sealed by painting with colours that either matched the existing or the weathered colour of the sheeting.



Material that had deteriorated beyond that point was replaced with matching, but non-asbestos based material. Gutters and downpipes were generally replaced with either preformed metal in a matching profile or with a standard system applicable to the original age of the building.

In several cases where blue asbestos was found to be present in the sheet materials, accepted protocols demand that the material be completely removed from site and replaced with similar, non asbestos based material.

In general the majority of the site services, such as fire fighting, water supply and drainage were checked and repaired as required, as part of the maintenance program. Sections of the light railway track, most notably that connecting to Buildings 46 and 47, were lifted and the underlying ballast removed to facilitate the cleaning and installation and reinstatement of adequate drainage. This work revealed that the original railway tracks lay beneath the later tracks, having been concreted into the base structure and extensively affected by rust as a result.

Landscape maintenance continues across the site. In particular tidal flushing to the wetland was restored, the open grassland of the central portion of the overall site is regularly mown. The areas of woodland and wetland were fenced to ensure their protection and management.

## **9.9 Initial Re-use of Some Buildings**

In the period during which OCA assumed control of the overall site, several buildings were upgraded to serve as initial management facilities. Others were simply re-used with little need for upgrading.

Building 122 was upgraded to serve as the initial office facilities for management staff. Upgrading primarily involved painting, replacement roofing and improved services. Building 6 was upgraded for service as an on-site environmental research centre, with a similar extent of work as for Building 122.

Several of the small buildings at the Jamieson Street entry were taken over to continue their service as accommodation for site security staff. Storage buildings, such as 113, were re-used with little change to their fabric.

As part of the Sydney Olympic Games site preparation and environmental management systems installation, one of the 1930s Explosives Storehouses, Building 45, was converted internally to accommodate the pumping systems for water management.

Building 46 is being partly used for the storage of solar power generation equipment. Solar panels, cabling and fencing is located external to the building and batteries and control equipment is located inside the building. This re-use was granted consent (DA S38/1/99) by the Minister for Planning on 10 June 1999.

Minor works and the re-use of Buildings 4, 5, 105, 46 & F associated with a pilot environmental education program at Sydney Olympic Park were granted consent (DA 154-

05-2002) by the Minister for Planning on 12 September 2002. The works associated with this consent have begun and almost complete.

A development application has been lodged with the Department of Infrastructure, Planning and Natural Resources for assessment on behalf of the Minister for Infrastructure, Planning and Natural Resources. It proposes the following development within the MPHP:

- Completion of the light rail loop between Building 46 and Building 39, to the south of the Woodland and an extension of the light rail line to Jamieson Street;
- Adaptive reuse of Building 22 for theatre and performance space (including external stage and amphitheatre); Building 18 for exhibition space and new amenities; Buildings 126 and 148 for an amenities upgrade; Building 12 for a food kiosk; and Building 15 for visitor information and merchandising;
- Reuse of Buildings 123 and 126 for Artists in Residence and cultural purposes; and Buildings 13, 4, 113 and 46 for exhibition and cultural purposes;
- Demolition of Building 115, an amenities building;
- Enhancement of public access including the construction of a bitumen coach drop off area at Building 46; a pedestrian bridge across the railway cutting adjacent to Building 46; a pedestrian and cycle link adjacent to Jamieson Street; a boardwalk adjacent to the foreshore; and the rationalisation of existing fencing;
- Tree planting along Jamieson Street and adjacent to the Woodland; and
- Temporary Shelter/Umbrellas for shade and shelter across the site.

This development was granted consent by the Minister on 23 December 2003. The works associated with this consent have begun.

## 10.0 Interpreting the Cultural Resource

### 10.1 Introduction

The *Burra Charter* defines interpretation as all the ways of presenting the cultural significance of a place. The Charter provides three articles, which are particularly pertinent to an interpretation plan for the MPHP.

#### *Article 25*

*The cultural significance of many places is not readily apparent, and should be explained by interpretation. Interpretation should enhance understanding and enjoyment, and be culturally appropriate.*

#### *Article 26.3*

*Groups and individuals with associations with a place as well as those involved in its management should be provided with opportunities to contribute to and participate in understanding the cultural significance of the place. Where appropriate they should also have opportunities to participate in its conservation and management.*

#### *Article 15.4*

*The contributions of all aspects of cultural significance of a place should be respected. If a place includes fabric, uses, associations or meanings of different periods, or different aspects of cultural significance, emphasising or interpreting one period or aspect at the expense of another can only be justified when what is left out, removed or diminished is of slight cultural significance and that which is emphasised or interpreted is of much greater cultural significance.*

Reasonable and well-managed access to the cultural heritage is both a human right and a privilege. It brings with it a duty of respect on the part of the visitor. Interpretation plays an important role in making cultural heritage accessible to people.

Heritage interpretation is a process that plans and provides for all visitors and the public at large, physical, intellectual, emotional or spiritual access to the cultural and ecological significance of places.

Through appropriate media and technologies and the responsible stimulation of ideas and opinions, it encourages the protection and conservation of the cultural and natural heritage. It also encourages and facilitates their appreciation by and for present and future generations. There should be a separate interpretation plan prepared for the MPHP site.

MPHP is a site with rich resources for interpretation. It has an attractive setting, a variety of landscapes, numerous picturesque and intact structures, a collection of movable heritage and a well documented history, with access to living participants in that history. It is sited within the metropolitan boundaries, is easily accessible by numerous means and is in an excellent general state of preservation. The difficult part of forming an interpretation plan for MPHP will be conveying the complexity of the cultural landscape for the visitor.

For interpretation of Natural Heritage the Plan of Management identifies locations where the wetland and woodland could be interpreted and includes limitations on disturbance to protect the ecological integrity of the resource.

An interpretation strategy is beyond the scope of this CMP, however the thematic analysis of the site and the statement of significance, ought to form the basis of any interpretation work undertaken. This Plan seeks to clarify the direction of the interpretation and planning process, rather than identify a strategy.

## **10.2 Interpretive Objectives**

The existing landscape of the MPHP would seem to be dominated by its period of occupation by the Navy, but the history and significance of the site is far more complex and layered. It is this complex and evolving significance that an interpretation plan must seek to communicate.

In communicating to the visitor, it must be kept in mind that not all visitors are alike and each visitor brings a different level of understanding, needs and interests to the site, for instance:

- Not all visitors are male and not all visitors are able to read English;
- Some visitors will have disabilities and some will be children; and
- Some visitors will not be Australian and will not understand or agree with our national histories.

Best practice interpretation should seek to respect and address the needs and interests of all visitors in an equitable fashion.

Heritage interpretation of a place should aim to reveal the significance and value of a place, thereby raising the level of respect of all visitors through well researched, sensitive and quality interpretation. Good interpretation ought to convey not only the dates and functions of structures, but convey significance and meaning of place.

Interpretation of a place such as the MPHP, which has a very complex and wide ranging set of values to the community, needs to be carefully planned to ensure that all levels and aspects of its significance are presented in an equitable and balanced fashion.

## **10.3 Interpretive themes**

In order to ensure that the significance and history of heritage places is presented in a national context, the Australian Heritage Commission has identified a number of Australian Historic Themes. The NSW Heritage Office has done likewise for NSW. These themes provide a context in which the history of a place can be interpreted. The history written for this CMP drew on three National and three State themes. In addition, a number of interpretive themes were identified which linked specific structures, features and precincts to historic themes.

The interpretive themes are:

1. First Australians
2. The Changing Environment
3. Defence
  - 3.1. Depot Administration
  - 3.2. Staff Facilities
  - 3.3. Armament Storage
  - 3.4. Inspection & Testing
  - 3.5. Transportation Infrastructure

The interpretive themes have been used to provide interpretive linkage between elements and provide another layer to the historic analysis. The interpretive themes provide a close relationship between the thematic history of the site, built elements and landscape. In this way, an integrated history of the site can be developed as the context of an interpretation strategy. Each structure and feature on the site has been listed against an interpretive theme and in doing so, patterns of association and development have been noticed which add to the complexity of the site. These patterns have been analysed in section 5, within the precinct analysis.

Material in **Part E, Implementing the Plan** shows how various structures and features of the site can be used as opportunities for interpretation. Each structure/feature has an interpretation message and suggestions for presentation of the message. The Original Establishment precinct has far more structures identified as having interpretive potential than the others. This imbalance is due to the number of different buildings across the entire span of history within this precinct, and the opportunities this presents for analysis of industrial function and process on the site.

As the site has a number of buildings, which are very similar or of the same type, only one was chosen from each type for interpretation of the themes relevant to that type. A representative sample of each theme has been chosen for interpretation to ensure the full range of industrial functions and history of the site can be explained (see further below in **section 10.5**).

Heritage place interpretation should interpret the place in its cultural and regional context, and should complement the interpretation of other similar places within the region. With MPHP, the obvious interpretive linkages are Spectacle Island, Goat Island, Garden Island and other naval sites in Sydney Harbour. Australia wide there is numerous armaments depots that have very similar histories and structures. There is a very close thematic and architectural relationship with WWII depots, which were used by the American forces in Queensland and the Northern Territory. There are close resemblances between sites in Queensland, Western Australia and Victoria.

The wider significance of MPHP, apart from its historical associations with the Navy, is where the finding of parallels becomes more difficult. One important parallel is within the history of the development of Sydney, and its relationship to the Parramatta River and Port Jackson. MPHP is a fine example of the preservation of landscape and vegetation from urban development, a history, which is mirrored at other sites within the Harbour, which have a combination of historic landscape, undeveloped bush and continuing Aboriginal associations.

## 10.4 Interpretation methods

The historic, social, spiritual and scientific significance of MPHP, within the context of Australian and NSW history, cannot be grasped by the average visitor without some interpretive assistance. Interpretation therefore requires planning to come up with a program or strategy, which suits the site, the audience and the resources available.

Each structure and feature, which exists on the site, contributes in some way to the significance and meaning of the site. This meaning can be conveyed through display, multimedia, signage, face-to-face guided or educative interpretation and publications. The buildings themselves are not self-explanatory and interpretation of design, function and process needs to accompany any conservation works for the purposes of interpretation.

The movable collection items; signage, tools, safety equipment, lifting equipment, furniture and operational fixtures specific to the buildings, provide some of the best means of interpreting building function and history. Those that belong to the Authority ought to be returned where appropriate to their respective buildings for interpretive purposes. Without the signage, benches, gantries, and other items, which illuminate the specific purpose of the structure, the structure is rendered somewhat meaningless.

It also must be stressed that the movable collection is not an end in itself of interpretation. The movable collection has significance through association with the place, and vice-versa. It is not a curated museum collection and should not be utilised as such. The site operated as a storage and testing depot, it did not produce armaments or explosives and therefore this ought not to be the focus of the interpretation. The significance of the depot lies in its operational function.

The interpretive process is reliant on there being a resource of information about particular building function, the uses of different tools and equipment and the processes, which went on in each structure. Oral history, video recordings and informed guides are tools, which can be put to good use in explaining industrial practices. The small inspection and testing workshops, for example, are ideally suited to a combination of 're-recreated display' and multimedia. The tools, furniture, signage and equipment used in the testing process could be reinstated as if in-situ and then their uses interpreted via a video display of ex-depot staff, or a face-to-face explanation by a trained guide who could also be an ex-depot staff member.

## 10.5 Opportunities for Interpretation

Table 5, further below details some ideas concerning the possible interpretation opportunities of a number of buildings across different precincts.

**Table 5. Opportunities for Interpretation of Significance.**

<b>Original Establishment Precinct</b>			
<b>No.</b>	<b>Name</b>	<b>Theme</b>	<b>Message</b>
8	Explosives Storehouse	Armament Storage	WWII explosives storehouse design, RANAD functions during WWII.
20	Gun Powder Magazine	Armament Storage	C19th explosives storehouse design, magazine design in Sydney
139	Residence	Staff Facilities	C19th work patterns and security
140	Explosives Workshop	Inspection & Testing	C19th testing of explosives, operational systems
235	Light Railway	Transportation	Specialised transport needs, design similarities to other armaments sites
236	Wharf	Transportation	Importance of the river, changing foreshore shape, armaments transport.
<b>Early Naval Occupancy Precinct</b>			
<b>No.</b>	<b>Name</b>	<b>Theme</b>	<b>Message</b>
155	Shell Examining Room	Inspection & Testing	Pre WWII testing and operational systems
16	Detonator Store	Armament Storage	Risks of armaments work
36	Explosives Magazine	Armament Storage	Pre WWII design of explosives magazines
127	Examining Room	Inspection & Testing	Pre-WWII testing and changes in armaments technology
128	Shell Scraping Room	Inspection & Testing	Pre-WWII testing and changes in armaments technology
<b>RAN Wartime Expansion Precinct</b>			
<b>No.</b>	<b>Name</b>	<b>Theme</b>	<b>Message</b>
42	Explosives Storehouse	Armament Storage	WWII Australian explosives storage design
<b>US Navy Utilisation Precinct</b>			
<b>No.</b>	<b>Name</b>	<b>Theme</b>	<b>Message</b>
56	Explosives Storehouse	Armament Storage	RANAD and the allies in WWII, US explosives storehouse design.

## **11.0 Managing the Visitor Experience**

Interpretation and visitor management are very closely linked. Interpretation is at once an aim in itself, and an important component or tool of visitor management. The aim of visitor management is to enable visitors to maximize their appreciation and enjoyment of the heritage place, while minimizing the risk of damage to the place by attrition, direct or indirect damage, or diminution of the experience of the place for other visitors.

MPHP will be a place where the visitor will be very closely managed and because of that their experience will be a managed one. The public will not have unlimited access to buildings, landscape or parts of the site, and therefore presenting the significance of the site through interpretation will be very important.

### **11.1 Sense of Place**

The most important element in the visitor experience is one, which it is very difficult to convey artificially, and that is “sense of place”. Sense of place mediates all aspects of the visitor experience and their remembrance of the site after the visit is finished. Sense of place is an ethereal and difficult experience to quantify or qualify, but it is this, which makes a place unique, remembered and sets the mood or tone for visitors to follow. It is vitally important to conserve sense of place, as this is part of the significance of the site and a large component of the visitor experience.

Sense of place follows close on the heels of the initial sighting or arrival at a place. The journey to the place and the means of journeying, expectations, as well as the arrival, can help or detract from sense of place. A lighthouse for instance, may impart a sense of awe, the journey through the coastal landscape, a sense of excitement. MPHP on the other hand, is a place of inquiry and curiosity.

MPHP works on a very different level to one with iconic structures and dramatic landscapes. The first impression of the landscape from the Jamieson Street hill, gives rise to a sense of curiosity and then reflection. The four different landscape characters can be seen in a great vista from here, and the collection of buildings of different periods, is surprising. The lack of new buildings gives rise to a sense of history and this engenders in the visitor a feeling of respect and interest.

The element of curiosity is a temporary one. Curiosity leads to inquiry, which if properly directed, leads to knowledge. MPHP will make the visitor curious, as its landscape cannot be easily read. Once the initial response to the place recedes, interpretation needs to start immediately to reinforce and capture that interest and mood. The quality of the interpretation will either heighten that sense of curiosity or dull it.

### **11.2 Potential Visitor Experiences.**

Learning about cultural significance and history should not be limited to a dull or didactic experience for the visitor. Cultural significance, if interpreted properly, can greatly enhance the visitor experience even if it is an unexpected end result of a recreational outing.



Revealing the cultural significance of a site can help protect the site through enhanced appreciation within the community and support for the aims of conservation.

There is a range of reasons that people will visit MPHP. These will change over time as the Parklands and the conservation works at the site develop. The types of experiences, which a visitor could have, are dependent on the range of functions, which MPHP will perform within the Parklands.

### **11.3 Establishing Limits of Acceptable Change**

Establishing acceptable and manageable limits of change within the MPHP is the key to maintaining the quality of the visitor experience.

Excessive or poorly managed tourism can degrade the natural, historic, social, spiritual and associational values of the site. Given that MPHP will have managed access and a continuing level of security this is less likely to occur. However impacts may be caused not only by the quantity of visitors, but also by the infrastructure set up to support them.

The wetland and woodland, for example, are very fragile, recovering ecosystems and habitats for endangered and threatened species. Overloading tourism in these areas would be contrary to the Authority's ecological policies and NPWS policy and would degrade the natural heritage values, including disturbance of fauna, which depend on the quiet unthreatening refuge provided by these areas.

The assessment of "Limits of Acceptable Change" at heritage sites has largely replaced the earlier concept of "Carrying Capacity", but both concepts apply here.

The Parklands Plan of Management addresses the limits of acceptable change and sets limits on carrying capacity and resilience within the MPHP.

### **11.4 Cultural Tourism**

In 1999 the ICOMOS General Assembly ratified the *International Cultural Tourism Charter*. This charter provides guidance, through a set of 6 primary principles, for managing tourism at places of heritage significance. These principles will inform the conservation policies of **Section 13**.

The principles of the Charter are:

#### ***Principle 1***

*Since domestic and international tourism is among the foremost vehicles for cultural exchange, conservation should provide responsible and well managed opportunities for members of the host community and visitors to experience and understand that community's heritage and culture at first hand.*

#### ***Principle 2***

*The relationship between heritage places and tourism is dynamic and may involve conflicting values. It should be managed in a sustainable way for present and future generations.*

#### ***Principle 3***

*Conservation and tourism planning for heritage places should ensure that the visitor experience is be worthwhile, satisfying and enjoyable.*

**Principle 4**

*Host communities and indigenous peoples should be involved in planning for conservation and tourism.*

**Principle 5**

*Tourism and conservation activities should benefit the host community.*

**Principle 6**

*Tourism promotion programs should protect and enhance natural and cultural heritage characteristics.*

The attractions of the Parklands will bring many tourists who will encounter the historic, social, scientific and aesthetic significance of MPHP as a by-product rather than a focus of their visit. Similarly for those visiting the site with ecology as their focus, the historic, social and aesthetic significance needs to be available for them to appreciate in addition to the natural features.

## 11.5 Visitor Facilities

Visitor facilities need to be very carefully sited and planned in order that they do not detract from the significance of the site or the sense of place. Retail and food and beverage outlets in particular shall reflect a generally agreed MPHP style and be sympathetic to the ambience of the place. The sense of place of the MPHP would be greatly disturbed by blaring music from food outlets or commercial bunting and advertising boards on historic structures.

The site was a very carefully managed industrial environment during its time as an Armament Depot. The sense of the managed environment needs to continue, with vehicular access restricted to management vehicles. Transportation round the site could be by foot, bicycle or light rail, and to and from the site could involve the ferry, a shuttle service from the Olympic Park Railway or by foot from P5 Car Park. Uncontrolled self drive access by visitors, (including coaches and private vehicles), including uncontrolled on-site parking would not be appropriate and would detract from the sense of place. However controlled on-site vehicle access and parking for the following will be allowed:

- people with disabilities,
- staff,
- service contractors;
- limited buses and coaches associated approved programs or tours; and
- temporary parking in designated areas associated with special approved cultural events and activities where parking outside the site is not appropriate.

Access and parking is only available provided that the movement or parking of any vehicle or equipment does not occur on areas not designed for that use.

Designated parking areas have been established where buses and coaches can be parked, if required, for the duration of the visits/activities undertaken within the approved programs.



**PART E**

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**Conservation Policies**

## 12.0 Primary Conservation Philosophy

The primary conservation philosophy which sets the framework for the future conservation, management and re-use of the MPHP, is one which will ensure that the complex is retained and conserved into the future, as an important component of the cultural and natural heritage resources of Sydney and NSW. It is assumed that the Authority will remain as the managing agency for the entire site. [The Newington Nature Reserve is managed under a Memorandum of Understanding from NPWS in accordance with a Plan of Management.]

- The objective for the MPHP will be the retention and conservation of its integrated natural and cultural significance and the interpretation of that significance to the public in a carefully managed fashion (as set out in the Parklands Plan of Management).
- The Authority and all other management agencies involved with the site will recognise that the natural and cultural values of the site will accrue as new uses and evolving values emerge.
- The Authority will retain and conserve the entire site as a single entity. Reductions in the size or boundaries of the site will not generally be permitted. [As previously discussed the Authority is currently in the process of seeking a realignment of the north western corner to reflect its historical boundary.]
- Conservation management of the site will recognise the layers of significance of the site, and the contribution of each component or characteristic to the whole.
- Conservation and management will recognise that the Indigenous and non-Indigenous associations with the landscape represent a shared use of its resources over time.
- The natural ecosystems, geodiversity and biodiversity of the wetland and woodland will be protected and conserved.
- Surviving evidence of Aboriginal occupation of the site will be protected and conserved.
- Conservation management will recognise that the historic uses of the site have finished and that various buildings and other structures have the capacity for carefully selected re-use within conservation and interpretation programs. The MPHP and its cultural landscape will be managed in an integrated manner within Sydney Olympic Park.
- The Authority will ensure that the significance of the MPHP is physically, intellectually and spiritually accessible to the general public and managed in accordance with the Parklands Plan of Management. These different forms of accessibility will be managed through visitor access, information technology research, education, and interpretation programs in a manner that evokes and acknowledges the site's significance.
- The conservation management of the MPHP should aim to increase public awareness progressively, and promote the complex as a significant visitor destination within Sydney, through managed research, education, interpretation and visitation programs.

- The management of the Newington Nature Reserve area will conserve the natural values, which the Newington Nature Reserve was gazetted to protect while recognising its associated cultural heritage values.

## 13.0 Operational Management Policies

### 13.1 Heritage Management Obligations

These general policies refer to the actions required of the Authority as manager of the MPHP, generated by the various agencies and interest groups which have independently recognised the significance of the place.

#### 13.1.1 Sydney Olympic Park Authority

- The Authority will ensure that management of the MPHP is consistent with the Parklands Plan of Management (which includes the Newington Nature Reserve Plan of Management, managed by the Authority in accordance with an Memorandum of Understanding with NPWS).

#### 13.1.2 National Agencies

- Although there are no formal obligations, the Authority will maintain a cooperative and productive association with the Australian Heritage Commission (AHC), in relation to the conservation management of the complex.
- The Authority will submit a copy of this CMP to the AHC, for their information.
- The Authority will liaise with the AHC to update the relevant listings in the Register of the National Estate for the site. For consistency, future listing by AHC should be based on the Site Definition, Heritage Assessment and Statement of Significance submitted to the NSW Heritage Council.

#### 13.1.3 NSW Heritage Council

- Once the property is listed on the NSW State Heritage Register, the Authority will conserve and manage the complex in accordance with the requirements of the *Heritage Act 1977*, including the additional criteria outlined in the *Heritage Amendment Act 1998* (as updated).
- The Authority will seek endorsement of this CMP from the NSW Heritage Council as being part of the Authority's Heritage and Conservation Register, as required under S170 of the *Heritage Act, 1977*.
- The Authority will seek endorsement of this CMP from the NSW Heritage Council, to facilitate the ongoing management of the complex in accordance with the policies, implementation strategies and exemptions contained within this CMP.
- The Authority will, as required, continue to refer any development proposals to the NSW Heritage Council, for approval under S60 and S140 of the *Heritage Act 1977*.

- Endorsement of this CMP by the NSW Heritage Council will enable the Authority to manage those components of the ongoing conservation and adaptation of the site covered within the Conservation Policies and Implementation Strategies (Parts E and F) of the CMP without further reference to the Heritage Council for approval.
- Endorsement of this CMP by the NSW Heritage Council will enable the Authority to undertake those works identified as Exemptions (section 22.9), without further reference to the Heritage Council for approval.
- The Authority will manage any potential or known archaeological material, with the exception of Aboriginal relics, in accordance with the relevant archaeological management provisions of the *Heritage Act 1977* and the *Heritage Amendment Act 1998* (as updated).
- The Authority will cooperate with the NSW Heritage Council to ensure that the MPHP site remains on the Authority's S170 Heritage and Conservation Register.

#### **13.1.4 NSW National Parks and Wildlife Service**

- Management of the MPHP will be consistent with values for which the Newington Nature Reserve was gazetted and the Newington Nature Reserve's Plan of Management (incorporated into the Parklands Plan of Management).
- The Authority will liaise with the NPWS in relation to the management and conservation of the stone artefacts found within the woodland that are listed on the NPWS Register of Aboriginal Sites.
- The Authority will comply with all relevant legislation such as the *Threatened Species Conservation Act 1995* the Parklands Plan of Management and the *Sydney Olympic Park Authority Act, 2001*.

#### **13.1.5 Other NSW State Agencies**

- The Authority will liaise with the Department of Infrastructure, Planning and Natural Resources in relation to the planning management requirements of *SREP 24*.
- The Authority will liaise with NSW Waterways regarding:
  - the on-going or future management of areas or items below the Mean High Water Mark along the Parramatta River;
  - the management of access to the wharf by recreational vessels; and
  - its role in any complementary management, conservation or public access related to that portion of the Wharf owned by NSW Waterways.
- The Authority will liaise with Department of Agriculture with respect to the *Noxious Weeds Act, 1993*.



- The Authority will ensure that fire management programs are undertaken in accordance with the *Rural Fires Act 1997*, *National Parks and Wildlife Act* and the Authority's fire management strategies.
- The Authority will comply with the relevant provisions of NSW Department of Transport legislation in relation to the use, management and operation of the light rail system around the Precinct.
- The Authority will comply with relevant OH&S and Environmental legislation and Australian Standards, particularly in relation to hazardous materials such as asbestos and other products, construction of walkways, pathways and access and egress from the site.
- The Authority will comply with the relevant provisions of statutory requirements regarding Easy Access and Disability Discrimination and the Authority's Access Guidelines.
- The Authority will liaise with NSW Fisheries regarding the management of estuarine vegetation, fish and fish habitat.

#### **13.1.6 Community Groups**

- The Authority will maintain a positive liaison with the National Trust of Australia (NSW), the National Parks Association and other environmental groups as appropriate (and determined by the Authority), in relation to the conservation management of the precinct.
- The Authority will submit a copy of this CMP to the National Trust of Australia (NSW), such that the Trust is aware of the changes to the precinct, and can update its heritage listing.
- The Authority will continue to take account of the philosophies, methodologies and guidelines contained in the *Australian Natural Heritage Charter*, the Australia ICOMOS *Burra Charter* and the ICOMOS *International Cultural Tourism Charter* in all conservation management programs for the precinct.
- The Authority will maintain positive liaison with relevant Naval Historical Societies, environmental interest groups and relevant Local Aboriginal Communities. As determined by the Authority these groups will be consulted in relation to the formulation and implementation of programs for the site.

### **13.2 The Authority to retain Management Control**

- In accordance with the *Sydney Olympic Park Act, 2001*, the Memorandum of Understanding with the NPWS (which identifies the Authority as the manager of the Newington Nature Reserve) and the Parklands Plan of Management the, the Authority will retain management control of the MPHP, as if it were a single entity.

- The Authority has responsibility for the management, conservation, interpretation and development of the MPHP, in conjunction with responsibilities for the management of the remainder of Sydney Olympic Park.

### **13.3 Ensure Shared Use and Development**

- The Authority, through the responsible management entity, will ensure that relevant interested parties may have an involvement in the place, but only on the basis of a shared approach to conservation, use and management. Shared resources may include components of the landscape, means of access, particular buildings or facilities that have been adapted for new uses, management structures, promotional, research, education, interpretation and visitor management programs.

### **13.4 Integrate with Sydney Olympic Park**

- In accordance with the *Sydney Olympic Park Act, 2001* and the Parklands Plan of Management, relevant conservation, management, development, research, education, promotion, visitor movement and management programs, environmental programs and supporting infrastructure development, for the MPHP will be undertaken to ensure integration with the broader Sydney Olympic Park.

### **13.5 Prepare a Development Plan**

- The Authority will prepare a Development Plan for the MPHP to guide the future use and development of the site, in the context of the Parklands Plan of Management and Parklands 2020.
- The preparation of the Development Plan will take account of and include the relevant recommendations and policies of this CMP.

### **13.6 Detailed Conservation Planning**

- As required, in the context of development proposals (which cannot be described as exempt in this CMP) the Authority will commission the preparation of additional conservation plans in accordance with the schedules contained in **Part F, Implementing the Plan**.

### **13.7 Restructure Heritage Listings**

- The Authority will approach the AHC and the National Trust of Australia (NSW), and encourage them to revise and update their heritage listing information and descriptions. The upgraded material will be on the basis that the site is a single entity, not a collection of individually listed buildings or other features and be in accordance with the material contained in the NSW State Heritage Register Nomination.

### **13.8 Secure Adequate Funding**

- The Authority will seek to ensure that adequate, consistent and long term funding is sought and secured for the implementation of research, education, promotion and management programs, building conservation, cyclical maintenance, and landscape management programs, both cultural and natural.
- The sourcing of funding will not be for projects that do not complement the overall conservation and management objectives for the site.

### **13.9 Secure Funding for On-Going Research**

- The Authority will seek to ensure sufficient funding for the continuation of monitoring of the condition of the wetland and woodland and an ongoing research program into the ecological aspects of these areas. The aim of such research should be to ensure the ecological sustainability of these areas and to provide references for management of other similar areas, and to conserve the threatened and endangered species and their habitats.
- The Authority will seek to ensure sufficient funding for the early commencement of an oral history collection program, among both Aboriginal community members and former Armament Depot personnel.
- The Authority will seek to ensure sufficient funding for the early commencement of a visual imagery capture program for the entire cultural and natural heritage resource of the site.
- The Authority will seek to ensure sufficient funding for the early preparation and implementation of the MPHP Interpretation Plan.
- The Authority will seek to ensure sufficient long term funding to enable a series of continuing long term research programs into the historical development and operation of the Depot and the characteristics of its setting, with the objective of progressively gaining an improved understanding of its cultural and natural significance.

### **13.10 Staged Development Programs**

- The Authority will progressively implement the conservation, remediation, adaptive re-use, research, education and cultural tourism programs on a staged basis. The primary objectives of the staged program will be to maintain the heritage significance of the resource into the future, through cyclical maintenance of the buildings, site and landscape elements, and to progressively increase public awareness of the significance and the utilisation of the site.

### **13.11 Maintain Security**

- The Authority will ensure an adequate and appropriate level of security is maintained across the site.

### **13.12 Review of the Conservation Master Plan**

- The Authority will review the CMP every five years or prior to major programs of upgrading or re-use or within twelve months of any new or modified Plan of Management relevant to the Precinct.
- The review process will ensure that the CMP remains relevant to the protection and conservation of the natural and cultural resources in the face of changed circumstances.
- Reviews will take account of any increased understanding of significance that has been developed in the intervening period.
- Reviews of the CMP will be based on the current editions of the *Australian Natural Heritage Charter* and the *Burra Charter* and other guidelines developed by the NSW Heritage Office and the NPWS.
- Any delays in completing the review process required by this provision will not negate the status or the validity of the CMP during the period of such delay.

## **14.0 Character Management Policies**

### **14.1 Conservation of an Integrated Landscape**

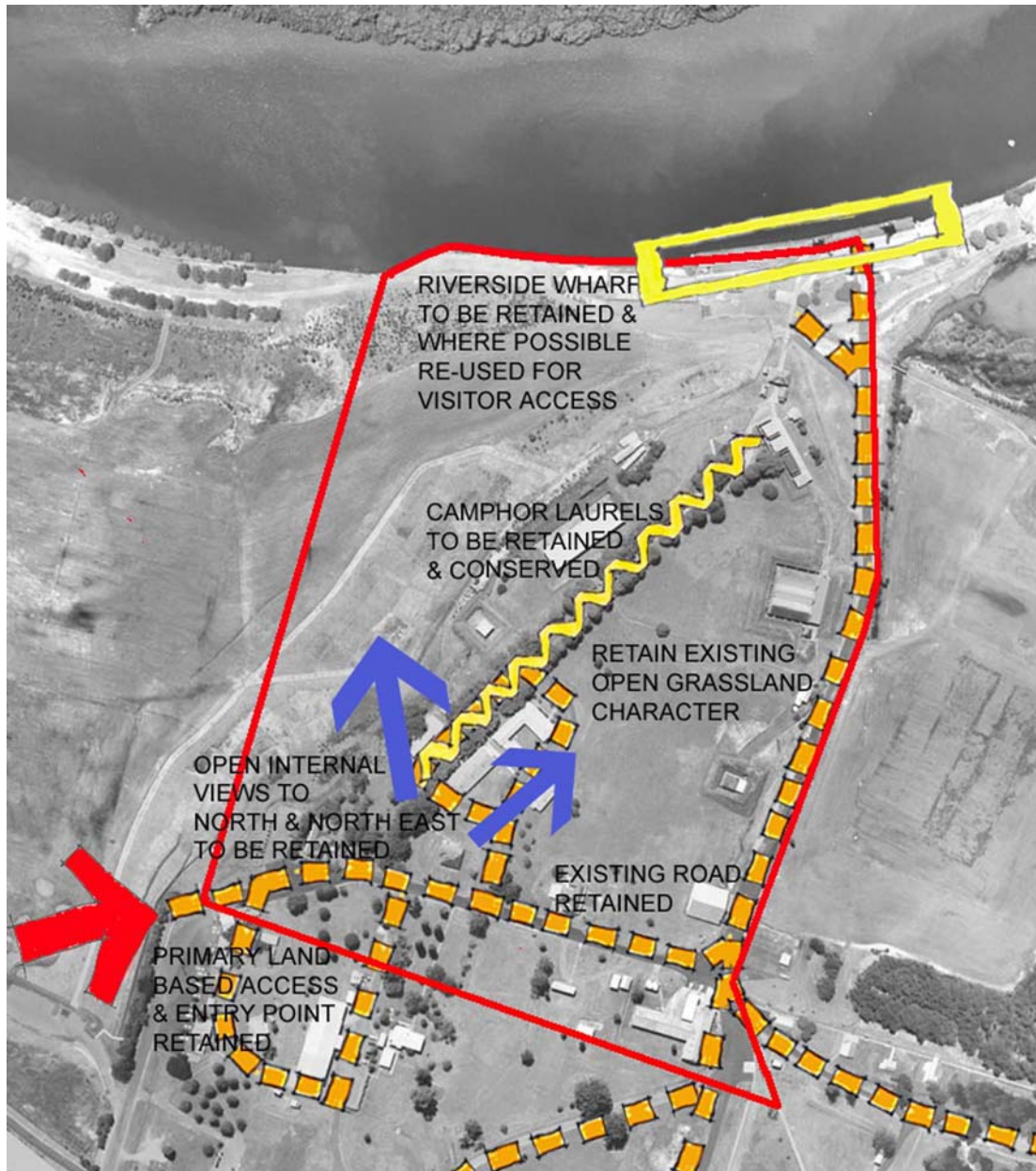
- Conservation and management of an integrated landscape will be undertaken in accordance with the Parklands Plan of Management. This CMP seeks to reflect and complement the management provisions and policies outlined in the PoM.
- Conservation and management will be based on a recognition and respect for the complementary natural and cultural values that together make the MPHP significant.
- The landscape management regime established in the Plan of Management for the wetland, woodland and lands immediately adjoining the Reserve will be implemented with due reference to the shared objectives of the Plan of Management and CMP. On the remainder of the MPHP the historic, visual and functional relationships between groups of buildings, structures, landforms and their associated infrastructure shall be retained wherever possible.
- The security fencing which is visually unsympathetic with the character of the place will eventually be replaced with a more sympathetic style or alternative means of restricted access, provided that equal protection and security is retained for natural communities and fauna species and the protection of the cultural and natural heritage.
- In response to clause 30(5), of the *Sydney Olympic Park Act, 2001*, the Authority will manage the lands adjoining the Newington Nature Reserve in sympathy with the Reserve.
- The secure nature of the MPHP will be maintained, albeit to an appropriate level, to protect the valuable collection of buildings, equipment and artefacts (as well as the habitat and wildlife refuge values).

### **14.2 Historic Precinct Character Management Policies**

#### **14.2.1 Original Establishment Precinct**

- The open grassland with scattered trees character of the Precinct, with its rising topography towards the west and avenue of Camphor Laurels will be retained.
- Should the condition of any of the Camphor Laurels deteriorate to a point that the grandeur of the avenue is affected then the subject tree will be replaced with a species which is of similar scale and form but which is not a noxious or environmental weed.
- The planting of large-scale bands of trees or other vegetation that would disrupt the open character of the grassland areas in this Precinct will be avoided.
- A reflection of the original fenced gardens should be re-established around Buildings 118, 123 and 126.

- The open views over the precinct to the north and north east from the roadways at the crest of the hill near Building 123 will be retained.
- The strongly defined landscape character of the old roadway from Jamieson Street down to the wharf precinct, with its rows of mature camphor laurels, will be retained and conserved.
- The traditional role of the riverside wharf, as an important point of access to the site, will be retained and where possible re-used for visitor access.
- The existing entry location at Jamieson Street, with its associated buildings, will be retained as the primary point of land based access to the site.

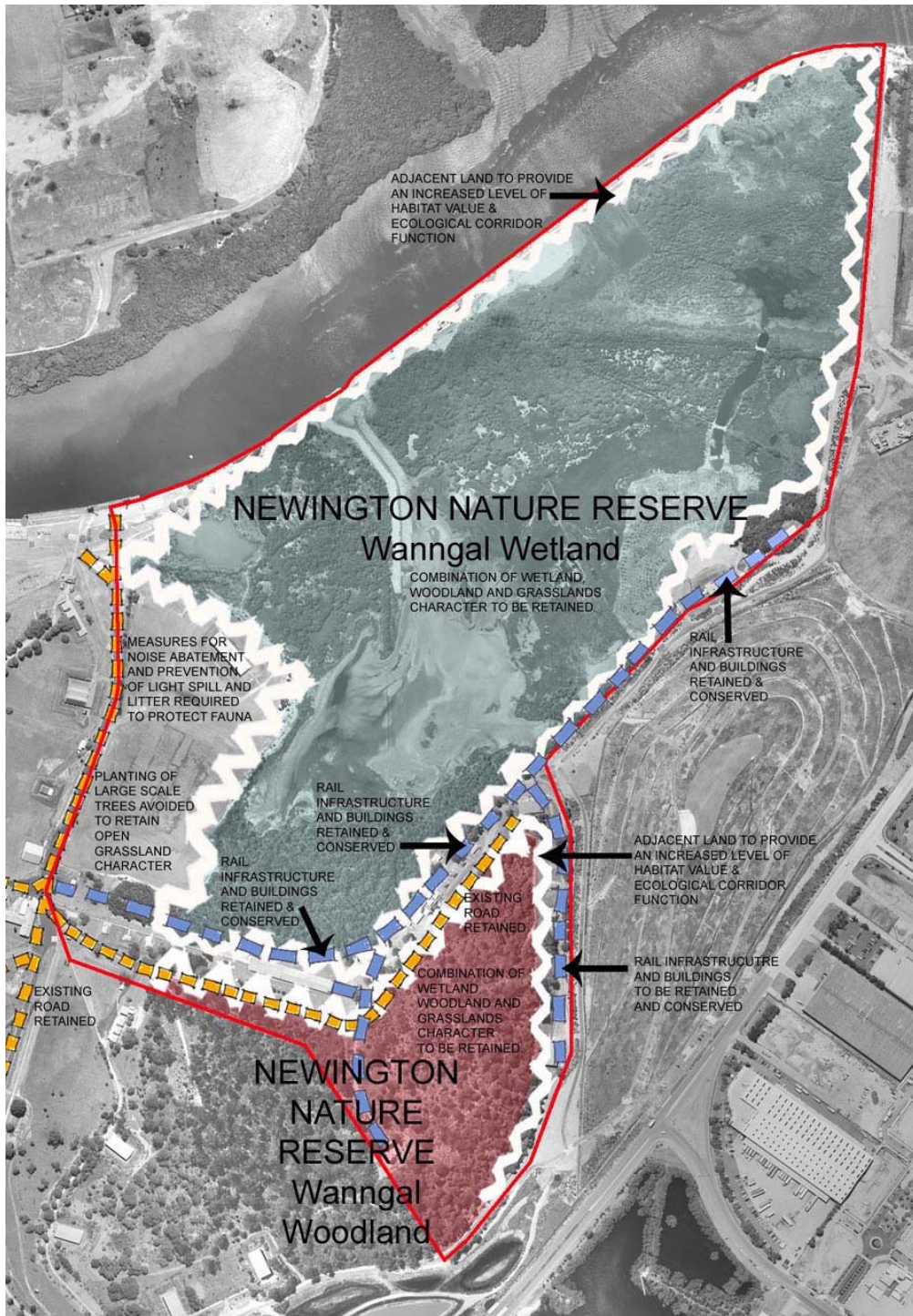


**Figure 14.1** – Original Establishment Precinct Character Management Policies (prepared by Sydney Olympic Park Authority, 2003)

#### **14.2.2 Early Naval Occupancy Precinct**

- The combination of grasslands, and wetland and woodland Nature Reserve character of the Precinct, with its flat topography and complex biodiversity will be retained and managed in accordance with the Parklands Plan of Management.
- As set out in the Plan of Management and as required by the *Sydney Olympic Park Authority Act, 2001*, land immediately adjacent to the wetland and woodland (Newington Nature Reserve) will be managed in sympathy with the values and objectives for the Nature Reserve and will progressively provide an increased level of habitat value and an ecological corridor function with due regard to the conservation of historic cultural buildings and rail infrastructure.
- Aside from the above mentioned increase in habitat value the planting of large-scale bands of trees or other vegetation in the grassland area (apart from land adjacent to the woodland and wetland) that would disrupt the open character of this grassland area will be avoided.
- The integrated nature of the Precinct, with carefully sited buildings and rail infrastructure threaded through the landscape, will be retained and conserved.
- The Authority will undertake to ensure appropriate measures for noise abatement and prevention of light spill and litter from any new activities in the Precinct and on the site generally, that may interfere with fauna in the wetland or woodland.



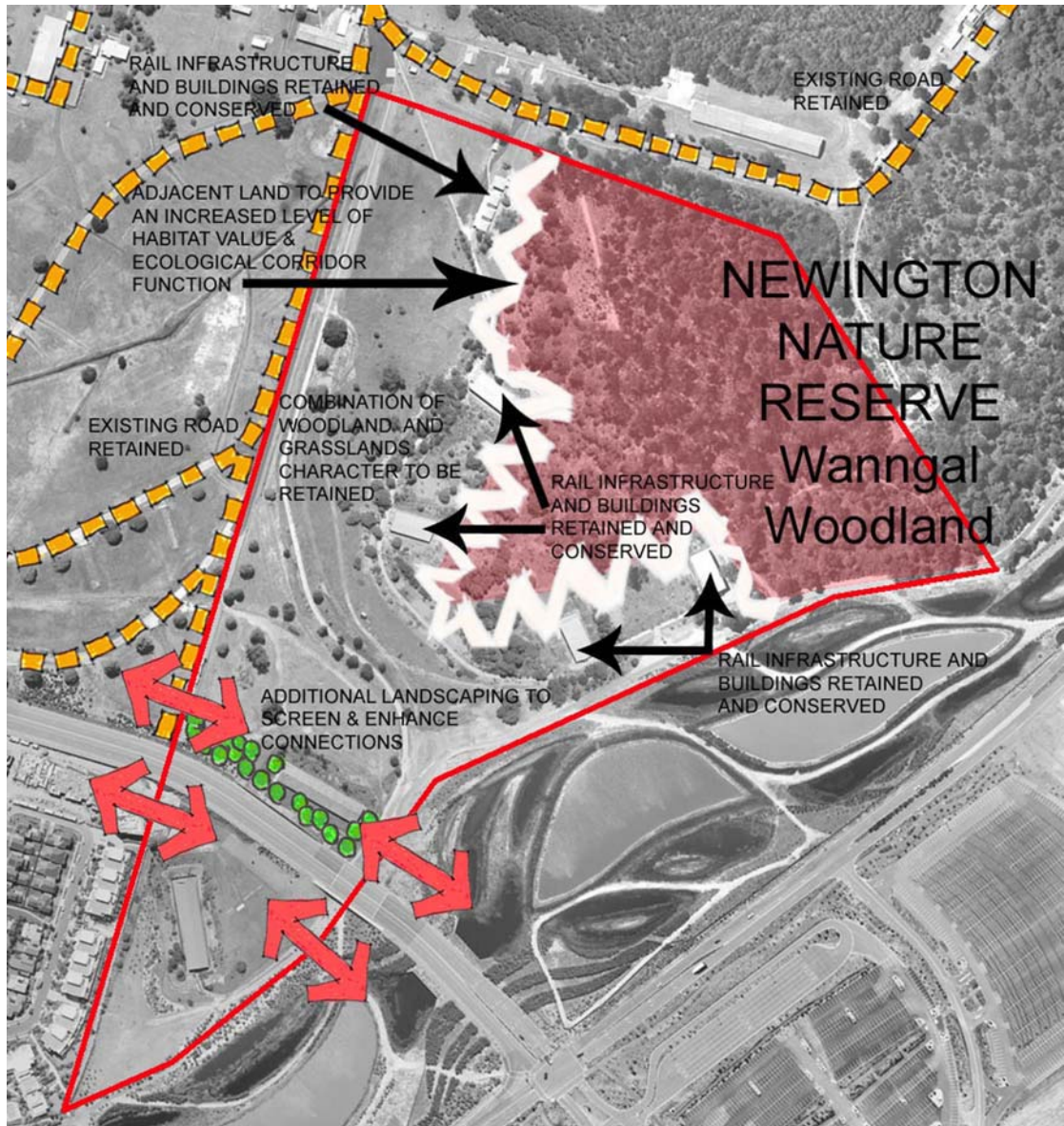


**Figure 14.2** – Early Naval Occupancy Precinct Character Management Policies (prepared by Sydney Olympic Park Authority, 2003)

### **14.2.3 RAN Wartime Expansion Precinct**

- The combination of grassland with scattered trees and woodland Nature Reserve character of the Precinct, with its gently sloping topography and complex biodiversity will be retained and will be managed in accordance with the Parklands Plan of Management.
- As set out in the Plan of Management and as required by the *Sydney Olympic Park Authority Act, 2001*, land immediately adjacent to the woodland (part of Newington Nature Reserve) will be managed in sympathy with the values and objectives for the Nature Reserve and will progressively provide an increased level of habitat value and an ecological corridor function, with due regard to the conservation of historic cultural buildings and rail infrastructure.
- Additional landscaping adjacent to the Holker Street road bridge will be provided to screen the view of the bridge and to enhance connections within the MPHP and between the MPHP and the adjacent Parkland areas. Plantings will allow glimpses through the screen planting.
- The planting of large-scale bands of trees or other vegetation in the grassland area (apart from land adjacent to the woodland and Holker Street road bridge) that would disrupt the open character of this grassland area will be avoided.





**Figure 14.3** – RAN Wartime Expansion Precinct Character Management Policies (prepared by Sydney Olympic Park Authority, 2003)

#### **14.2.4 US Navy Utilisation Precinct**

- The open grassland character of the Precinct, with its rising topography towards the south will be retained and managed in accordance with the Parklands Plan of Management.
- Additional landscaping adjacent to Holker and Jamieson Streets will be provided to screen the view of the Silverwater Correctional Centre, Holker Street and the Newington residential development and to enhance connections within the MPHP and between the MPHP and the adjacent Parkland areas. Plantings will allow glimpses through the screen planting.
- The planting of large-scale bands of trees or other vegetation in the grassland area (apart from land adjacent to Holker and Jamieson Streets) that would disrupt the open character of the grassland areas will be avoided.
- The open views over the Precinct to the south and south east from the roadways at the crest of the hill near Building 123 will be retained.
- The Burma Road and Banana names will be retained and the infrastructure links between the wharf and the Burma Road retained.



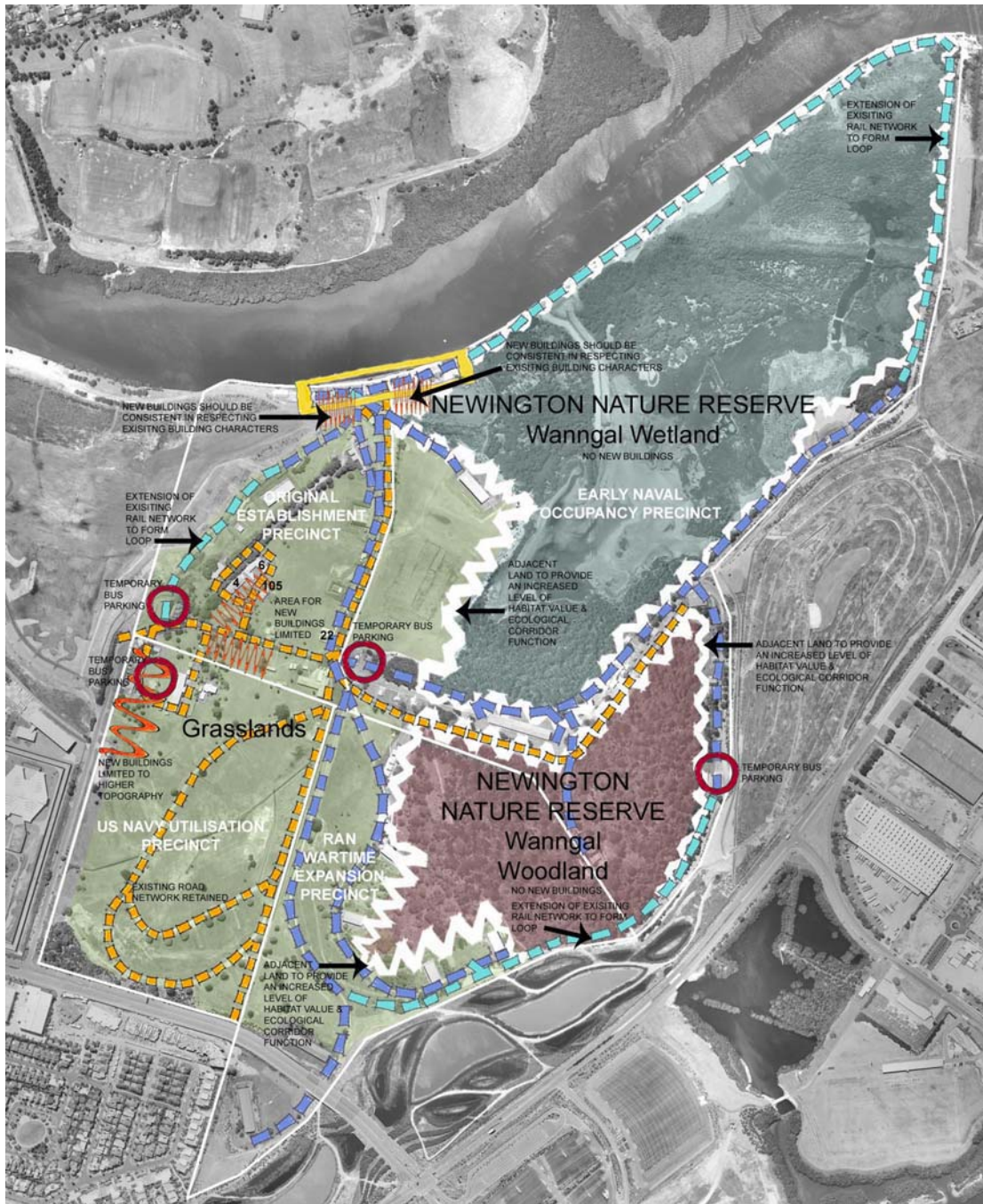
**Figure 14.4** – US Navy Utilisation Precinct Character Management Policies (prepared by Sydney Olympic Park Authority, 2003)



### 14.3 Site Development Guidelines

- Development of the MPHP will be in accordance with a Development Plan that integrates management programs set out in the Parklands Plan of Management with the conservation policies contained in this CMP.
- The *Sydney Olympic Park Act, 2001* requires all proposed development to be consistent with the Environmental Guidelines. All works within the MPHP will reflect the principles of ecologically sustainable development as outlined in the Authority's Environmental Framework, which includes Environmental Guidelines for the Summer Olympic Games and the Sustainability Policy and Strategy for Sydney Olympic Park.
- In general, the existing road network (not including pathways and cycleways) will not be extended, except as required to service the provision of new buildings that are located in accordance with the guidelines established by this CMP or where limited areas are required for on-site bus drop off and collection points. These extensions will be of a character that expands to a minor extent the adjacent bitumen roadway surface.
- Extension of the existing light rail network to link the sections that terminate near Buildings 39 and 45 will be acceptable, to form a rail loop within the site. Extension of the light rail network to link the section that terminates close to Building 150 with the Jamieson Street entry to the MPHP is also acceptable.
- Conservation and re-use of the MPHP's buildings will be based on the appropriate re-use of the existing buildings. It is essential that new uses are first tested against the existing buildings before any consideration be given to the construction of new buildings. New buildings will only be permitted if there is no existing buildings available for re-use or the level of adaptation required would reduce the significance of the building. New buildings will be sited generally within restricted locations and be of a scale, form and architectural expression that respects the character and natural and cultural heritage values of the MPHP.
- Any new buildings considered for the immediate vicinity of the wharf will be of a scale and character that respects the small scale of the existing buildings and be sited in locations to the east and west of the wharf that do not challenge the supremacy of the functional and visual relationships between the existing buildings and the wharf.
- Any new buildings considered for the remainder of the Original Establishment Precinct will be limited to the proximity of Buildings 4, 5, 6 and 105, and adjacent to the southern side of the road that runs east from the crown of the hill down to Building 22. It has been recognised that an indigenous cultural centre is required within the MPHP and the addition of a new building within this area to support this use would be appropriate subject to the design being of a scale, form and architectural expression that respects the character and natural and cultural heritage values of the MPHP. It is anticipated that additional amenities facilities may be also required in the vicinity of the five ways. A small amenities building adjacent to Buildings 22 may be required to facilitate its reuse.

- In general, new permanent buildings will not be constructed within the Early Naval Occupancy Precinct. However the location of bird hide structures immediately adjacent to the wetland within that area to be utilised as additional habitat would be appropriate if carefully designed.
- In general, new buildings will not be constructed within the RAN Wartime Expansion Precinct apart from additional facilities. It is recognised that additional facilities (including toilets and shade and shelter) are required to support the approved education program, which is focussed in this part of the MPHP. Any new facilities will be carefully designed to integrate with the existing landscape and scale and character of existing buildings. Facilities buried within the internal face of the blast containment earth mound that surrounds the buildings is one possible appropriate design solution.
- Any new buildings considered for the US Navy Utilisation Precinct will be limited to higher topography along the Jamieson Street boundary, reflecting the area which was utilised for the last period of development for temporary buildings in the closing years of the Armament Depot operations. This area may be considered for the erection of a limited number of single storey short stay residential style buildings, as part of the educational programs, but only if the existing building stock on site is not appropriate for re-use in this regard. The design of such buildings shall be responsive to the “institutional” style of existing buildings, shall be of simple forms and masses with hipped or gabled roofs. They shall be clad externally with light weight materials or sheet.
- The scale of any new buildings will respect the scale of the existing building stock in the area and be articulated to avoid dominating that scale and complexity. In general any new buildings should not exceed a single storey in height.
- Any development proposals will take account of the likelihood of there being Aboriginal and historical archaeological resources within the MPHP.
- The secure nature of the MPHP will be maintained, albeit to an appropriate level, if the valuable collection of buildings, equipment and artefacts (as well as the habitat and wildlife refuge values) are to be protected.
- The use of the MPHP (landscape and buildings) for temporary events and activities will be undertaken in a sensitive manner and in accordance with the Plan of Management and specifically the capacity and resilience levels set out in the Plan of Management. The provision of additional services and facilities to support temporary events and activities in the MPHP will be based on the principle of temporary supply and complete removal at the conclusion of the event or activity.



**Figure 14.5** – Site Development Guidelines (prepared by Sydney Olympic Park Authority, 2003)



#### **14.4 Upgrading of Services and Amenities**

- Existing services will be checked, conserved or upgraded as necessary to facilitate the re-use of existing buildings or new buildings to support the achievement of approved management programs (as set out in the Plan of Management), to support temporary cultural events and activities and to maintain fire fighting capabilities.
- The provision of new or extended services infrastructure will be undertaken with minimal physical or visual impact on the character of the MPHP. Where possible, such infrastructure will utilise existing service corridors, which have already been disturbed by earlier development or infrastructure.
- As appropriate, the provision of additional facilities and amenities to support temporary cultural events and activities on the site will be based on the principle of temporary supply and complete removal at the conclusion of the event or activity.
- The provision of public and staff toilet accommodation on site will be confined where possible, to the re-use and upgrading of existing toilet facilities, or to the careful introduction of new amenities into existing buildings. Where no existing buildings are available for required amenities to support approved programs and new buildings are required to house these amenities, the scale of any new building will respect the scale of the existing building stock in the area and be articulated to avoid dominating that scale and complexity. It is anticipated that a new amenities building may be required to support the education program, which is focussed in the Early Naval Occupancy Precinct. A new amenities building in this area will be carefully designed to integrate with the existing landscape and scale and character of this existing buildings. It is anticipated that additional amenities facilities may be also required in the vicinity of the five ways.

## **15.0 Aboriginal Heritage Conservation Policies**

### **15.1 Recognition of Significance**

- The Aboriginal heritage and archaeological significance of the MPHP, as a component of the Homebush Bay area, will be recognised as an integral part of the cultural significance of the site.
- The Authority will recognise that some Aboriginal communities are continuing to establish or refine the nature of the cultural significance for the lands to which they have a connection.
- The Authority will commission an Aboriginal Cultural Heritage Assessment of the Aboriginal resources of the precinct and Aboriginal social and spiritual values for the site, its natural areas and archaeological resources.

### **15.2 Consultation with Aboriginal Communities**

- The Authority will continue to liaise with the Metropolitan Local Aboriginal Land Council (MPALC), together with Traditional Owner or Descendent organisations for the area, on matters relating to the protection, management and interpretation of the Aboriginal cultural heritage of the site, in consultation with the NPWS and in accordance with the Parklands Plan of Management which incorporates the Newington Nature Reserve Plan of Management.
- The MLALC, relevant Traditional Owner organisations and the NPWS will be consulted on any proposal for the conservation or maintenance of the natural or European cultural resources in the vicinity of known Aboriginal sites.
- The Authority will develop, in conjunction with NPWS, a formal consultation procedure with the MLALC and relevant Traditional Owner organisations on issues, which may impact on Aboriginal cultural values and resources.

### **15.3 Protection of Aboriginal Cultural Resources**

- The Authority will integrate the conservation and management of Aboriginal heritage items into the planning and management procedures for the site.
- The precise location of Aboriginal sites will not be highlighted on any map or plan provided for interpretation programs.
- Access to the Aboriginal cultural remains identified within the Woodland will be managed in consultation with the MLALC, relevant Traditional Owner organisations and the NPWS.

#### **15.4 Managing Aboriginal Sites**

- The Authority will facilitate any updating of previously recorded Aboriginal sites on the NPWS Aboriginal Sites Register.
- The Authority will initiate an Aboriginal Cultural Heritage Assessment to investigate the Aboriginal cultural significance of the site and identify appropriate management strategies to ensure their protection.
- The Authority will ensure that there is regular monitoring of the impact on the condition of identified sites from landscape management, education or cultural tourism activities.
- The Authority, in conjunction with NPWS, will facilitate access to Aboriginal cultural resources for Aboriginal groups and individuals and will recognise that there may be times when non-Aboriginal people should be denied access for cultural reasons and when Aboriginal people might need to be denied access for ecological reasons.

#### **15.5 Interpretation of Aboriginal Cultural Resources**

- Commemoration of Aboriginal heritage associations with the site will recognise the subsequent layers of historical development and the need for a shared approach in the commemoration and protection of those layers.

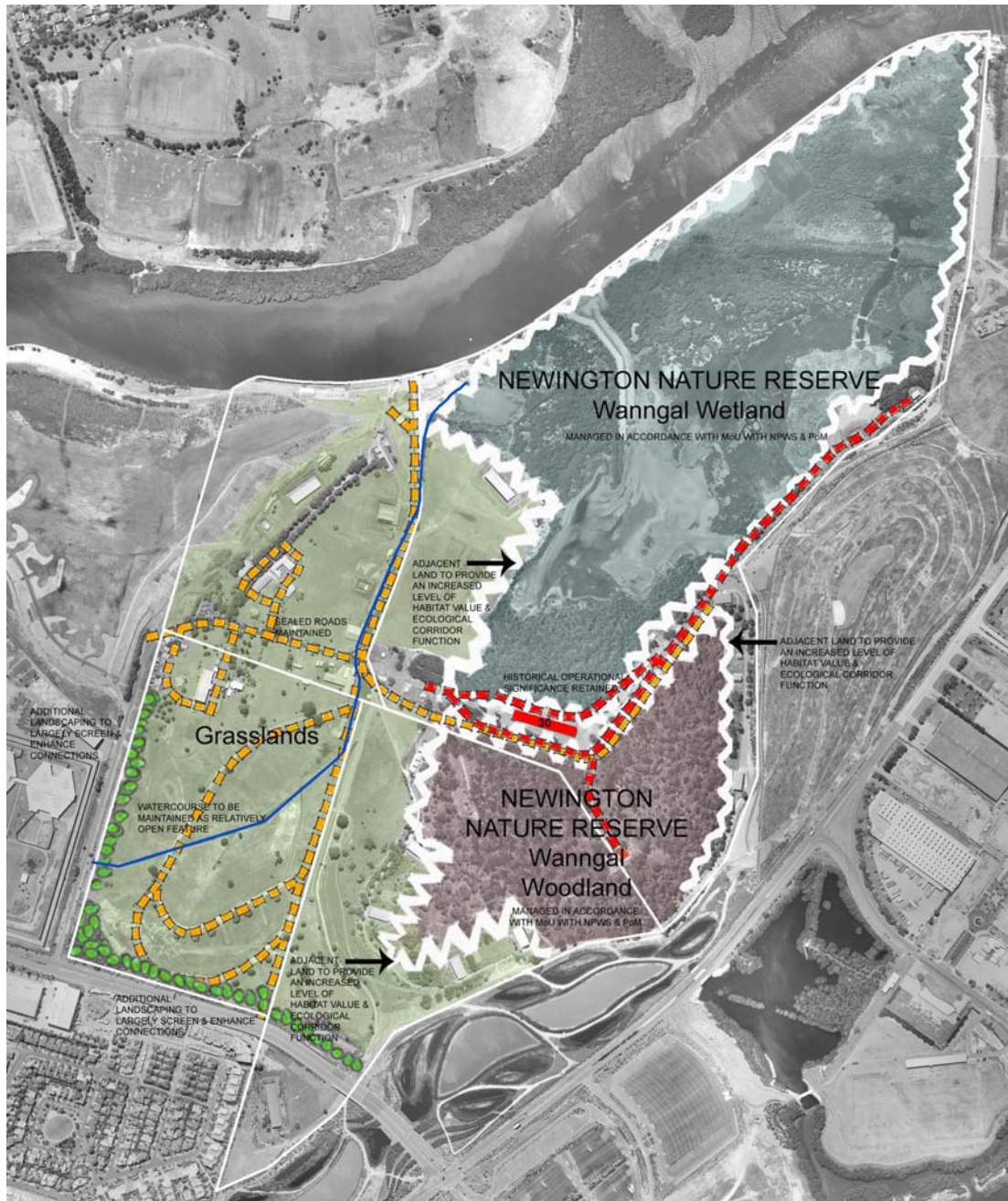
## 16.0 Landscape Conservation Management Policies

### 16.1 Managing the Landscape Character

- The Authority will manage the landscape of the MPHP as a component of the Parklands system of open space and sensitive ecological areas in the wider Homebush Bay area and in accordance with the Parklands Plan of Management.
- Management of the Newington Nature Reserve will be managed by the Authority in accordance with a Memorandum of Understanding with the NPWS and the Parklands Plan of Management (which incorporates the Newington Nature Reserve Plan of Management).
- The landscape management regime established in the Plan of Management for the wetland and woodland (Newington Nature Reserve) and lands adjoining the Reserve will be implemented. On the remainder of the MPHP the landscape management programs will generally recognise the historical landscape management regimes that were designed to minimise fire risk to the explosives storehouses and workshops, such as mowing and understorey clearance. The Authority will avoid close planting or regeneration close to buildings and infrastructure.
- The interface areas between the landscape precincts, in particular the narrow zone between the Newington Nature Reserve wetland and woodland, close to Building 30 will be recognised as an important natural part of the complete vegetation sequence from the river to the woodland, as well as a historical operational corridor to the outer areas of the site. Clearings around buildings and infrastructure will be recognised as having historical operational significance, but there will also be a need to provide an increased level of habitat value and an ecological corridor function on lands adjacent to the Newington Nature Reserve.
- Landscape management will take account of the management and eradication of noxious weeds identified in the *Noxious Weeds Act 1993*.
- The watercourse through the grassland will be maintained as a relatively open feature, although vegetation maintenance to provide bank stabilisation and habitat values will be continued.
- The Authority will ensure that stormwater drains and open drainage channels are cleaned on a regular basis, kept free from debris and are operating efficiently in order to prevent drainage problems across low level areas.
- The more steeply sloping cross sectional profiles of drainage swales in grassed areas, and around exposed sumps, may be re-graded as necessary to enable them to be mechanically mown and kept free of plant growth that might restrict natural stormwater flows.
- Small garden areas of native shrubs around the building groups will be maintained and enhanced where historical evidence is available to define their extent or character.

Planting will be chosen to avoid species that will grow to a height that obscures the buildings.

- The screen planting (which allows some glimpses) along the boundaries to Holker and Jamieson Streets will be maintained. Plantings, which screen internal views over the open grassland, will be avoided.
- Vegetation will be kept clear of pathways, roadways and the light rail system, to facilitate their proper functioning. Trees will be kept clear from the tops and sides of the railway cuttings.
- Sealed roads will be maintained to ensure that their edges are defined and the grass kept well cut. Roadways without curbs will be maintained in that form.
- Sealed roads will be repaired to maintain a surface of bitumen.
- The secure nature of the MPHP will be maintained, albeit to an appropriate level, to protect the valuable collection of buildings, equipment and artefacts (as well as the habitat and wildlife refuge values).

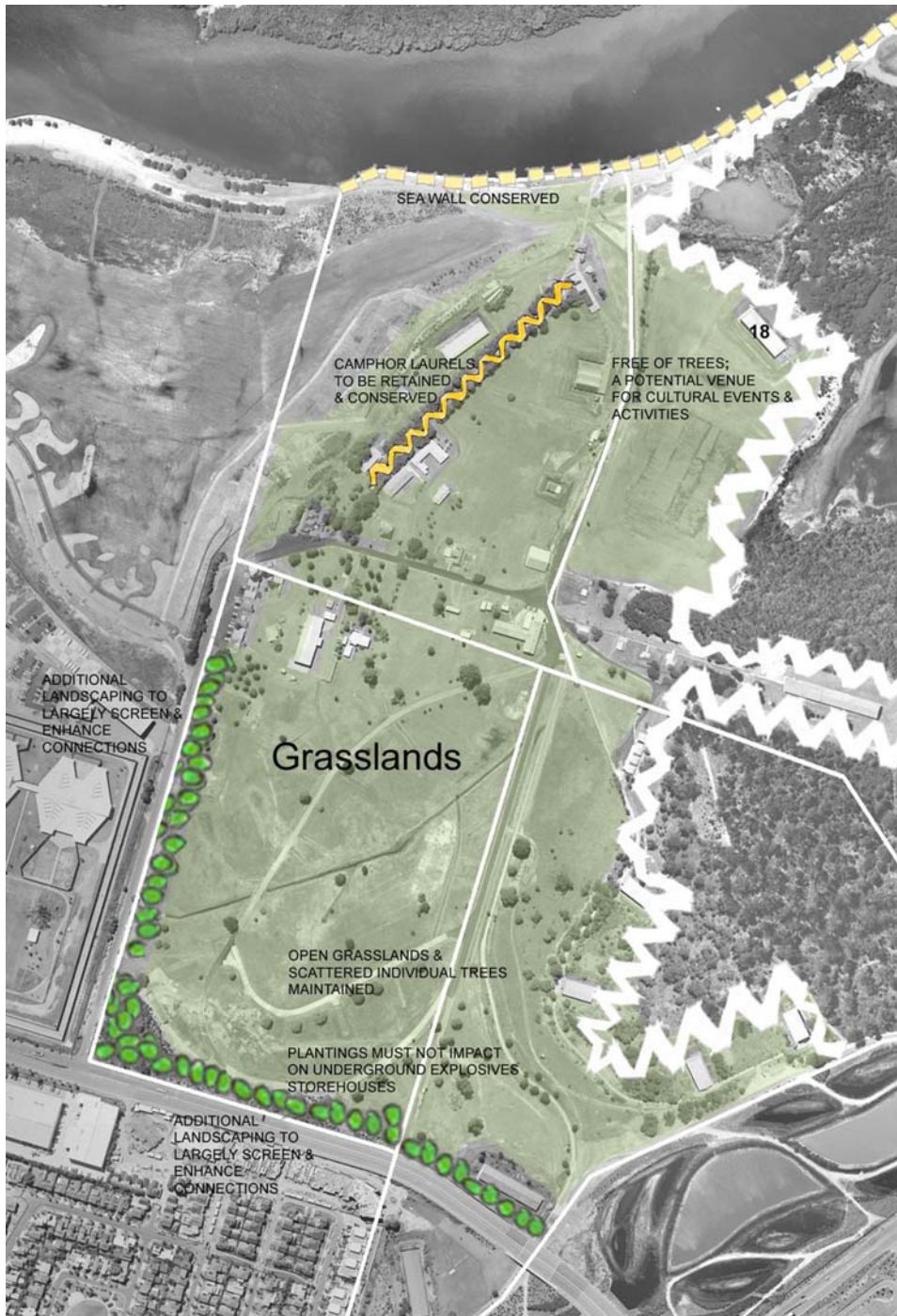


**Figure 16.1** – Landscape Character Management Policies (prepared by Sydney Olympic Park Authority, 2003)

## 16.2 The Grasslands

- As required by the *Sydney Olympic Park Act, 2001* the landscape management regime established in the Parklands Plan of Management for the grasslands adjoining the Reserve will be implemented.
- Additional landscaping will be provided adjacent to Holker and Jamieson Streets to largely screen and to provide additional landscaped connections within the MPHP and between the MPHP and the adjoining Parklands.
- On the remainder of the site covered by grasslands the Authority will manage and conserve the grasslands in a manner that protects the existing open character.
- The pattern of individual trees scattered across the grasslands of the US Navy Utilisation Precinct will be maintained, avoiding the planting of new trees in a manner that obscures views across and within the Precinct. Dense understorey planting will be avoided.
- The row of mature Camphor Laurel trees along the former entry roadway of the Original Establishment Precinct will be maintained as a major cultural landscape feature recognising that at some time in the future there will need to be planned replacement of the trees as they deteriorate such that the grandeur of the avenue of Camphor Laurels is diminished. Replacement trees should be of a species which is of similar scale and form but which is not a noxious or environmental weed.
- The large open grasslands area to the south of Building 18 in the Early Naval Occupancy Precinct will be maintained free of trees as potential venue for cultural events and activities (where permitted under the Plan of Management).
- Trees and larger scale plants will not be planted in the vicinity of underground explosives storehouses in a manner that may cause long term damage to the structures. Native grasses are the preferred option to discourage public access to the areas above the underground explosives storehouses.
- The potential provision of public recreation or picnic facilities will be carefully controlled and sited to avoid the visual clutter of the open grassland character.
- The sandstone sea wall and fascine dykes that separate the wetland from the river will be conserved, maintained and their historic and archaeological significance interpreted.
- Prior to any development, consideration should be given to presence of Aboriginal and historical archaeological resources within the grassland.



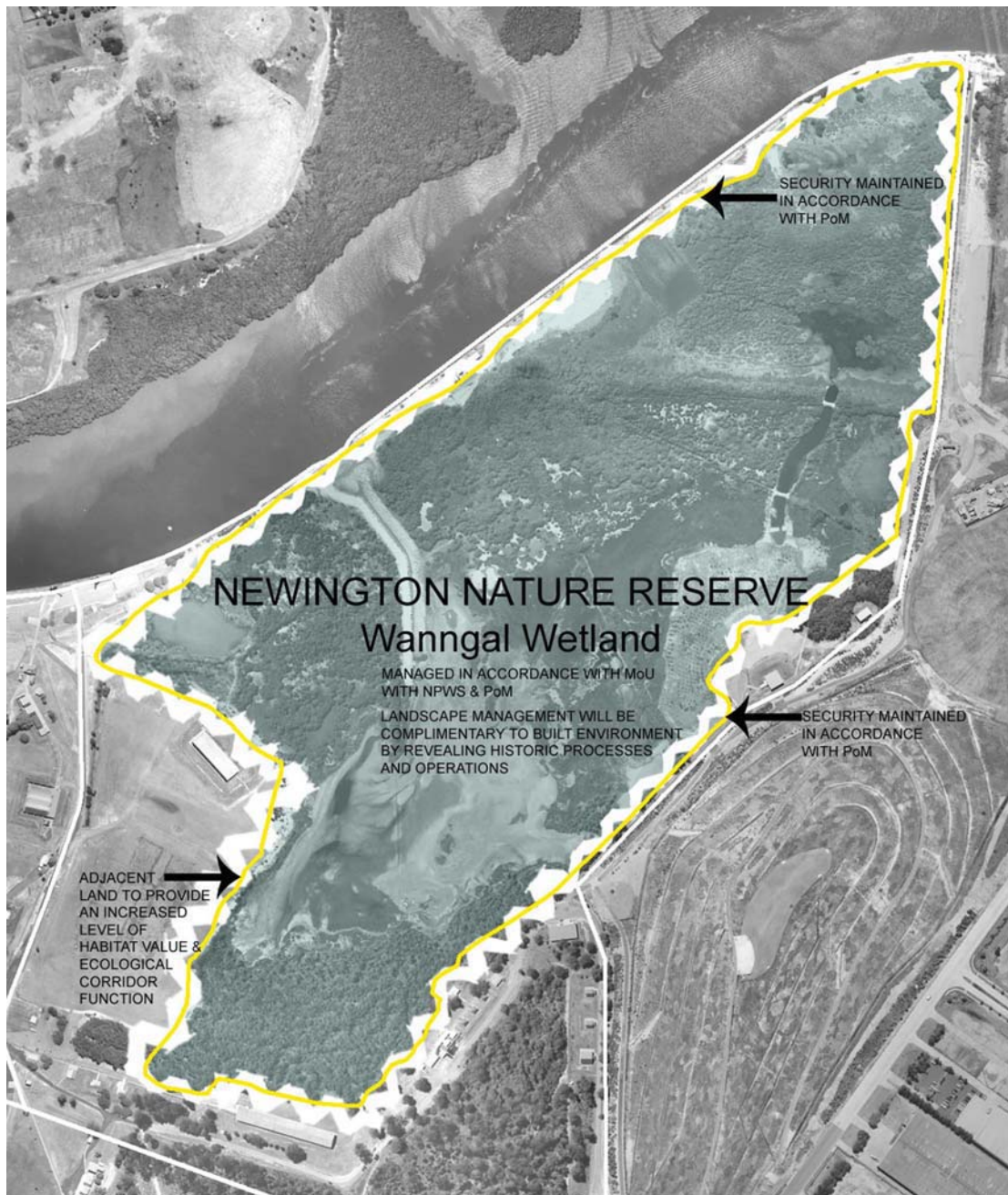


**Figure 16.2** –Grasslands Character Management Policies (prepared by Sydney Olympic Park Authority, 2003)



### **16.3 The Wetland**

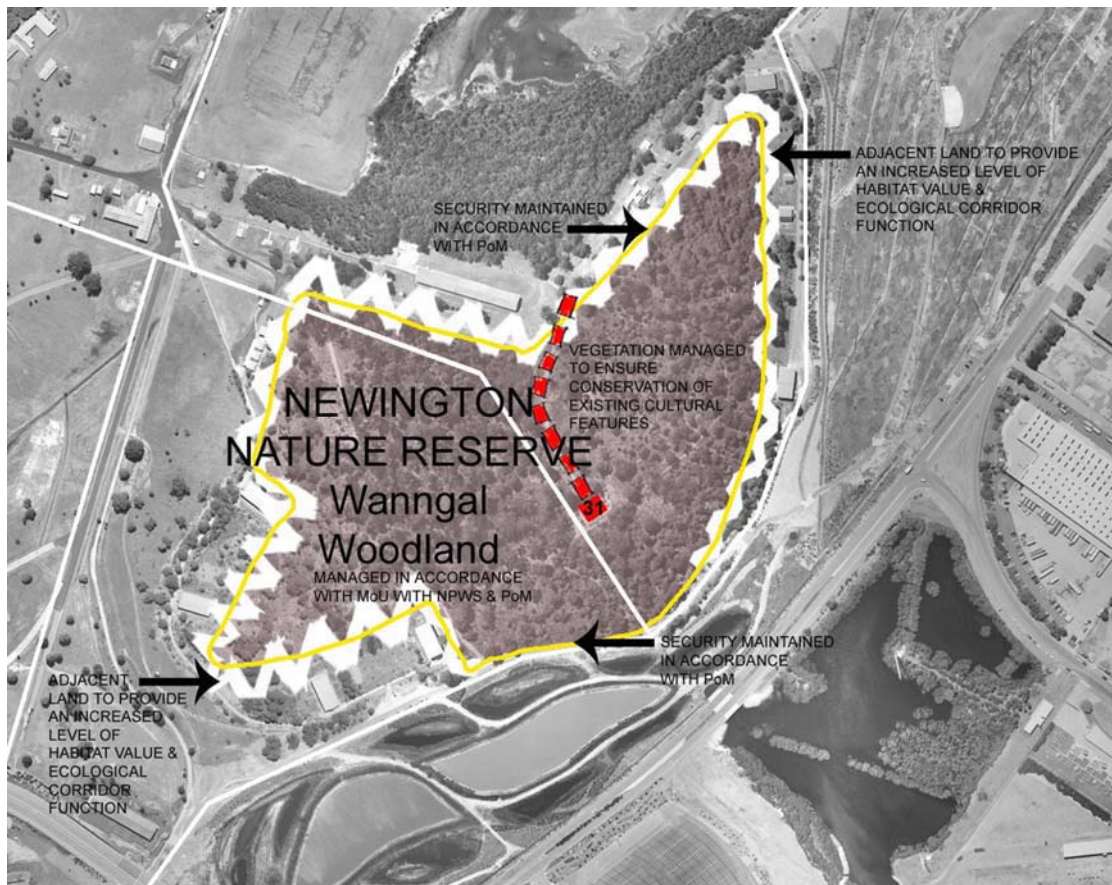
- As part of the Newington Nature Reserve, the wetland will be managed in accordance with the Parklands Plan of Management, which incorporates the Newington Nature Reserve Plan of Management.
- The lands adjoining the wetland will be managed in sympathy with the values of the wetland as required by the *Sydney Olympic Park Act, 2001*. As set out in the Parklands Plan of Management lands adjoining the wetland will be utilised for increased habitat and as an ecological corridor. The wetland will not be expanded such that the open character of the grasslands is diminished.
- The landscape management of this precinct will be complimentary to the built environment, by revealing the historic processes and operation of the site where this is consistent with safety requirements and the Newington Nature Reserve Plan of Management.
- Prior to any development, consideration should be given to presence of Aboriginal and historical archaeological resources within the wetland.
- Security maintained in accordance with the Plan of Management.



**Figure 16.3** –Wetland Character Management Policies (prepared by Sydney Olympic Park Authority, 2003)

## 16.4 The Woodland

- As part of the Newington Nature Reserve, the woodland will be managed in accordance with the Parklands Plan of Management, which incorporates the Parklands Plan of Management.
- The lands adjoining the woodland will be managed in sympathy with the values of the woodland as required by the *Sydney Olympic Park Act, 2001*. As set out in the Parklands Plan of Management lands adjoining the woodland will be utilised for increased habitat and as an ecological corridor. The woodland will not be expanded such that the open character of the grasslands is diminished.
- Vegetation around Building 31, light rail track, and other infrastructure within the woodland will be managed to ensure the conservation of those cultural features.
- Prior to any development consideration should be given to presence of aboriginal and historical archaeological resources within the wetland.
- Security maintained in accordance with the Plan of Management.



**Figure 16.4** –Woodland Character Management Policies (prepared by Sydney Olympic Park Authority, 2003)

## 17.0 Built Environment Conservation Policies

### 17.1 Conservation Principles and Processes

#### 17.1.1 The Burra Charter

The conservation and management of the historic values of the MPHP shall be undertaken in accordance with the principles and processes of *The Burra Charter* issued by Australia ICOMOS. These principles and processes are now the accepted standards for guiding cultural conservation practice in Australia.

#### 17.1.2 Consistent Terminology

In order to achieve a consistency in approach and understanding of the meaning of conservation by all those involved, a standardised terminology for conservation processes and related actions should be adopted. The terminology in the *Australian Natural Heritage Charter* (for natural heritage aspects) and *The Burra Charter* (for cultural heritage aspects) is a suitable basis for this.

The following terms apply to the historic items and fabric of the precinct, and are included hereto assist understanding of the intent of the conservation requirements in this section.

- **Conservation** means all the processes of looking after a place so to retain its cultural significance. It includes maintenance and may, according to circumstance, include restoration, preservation, reconstruction and adaptation, and will commonly be a combination of more than one of these.
- **Maintenance** means the continuous protective care of the fabric, contents and setting of the place, and is distinguished from repair. Repair involves restoration or reconstruction and it should be treated accordingly.
- **Preservation** means returning the fabric to a known earlier state by removing accretions or by re-assembling or refixing components without the introduction of new materials.
- **Restoration** means returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.
- **Reconstruction** means returning the place as nearly as possible to a known earlier state or the introduction of materials (new or old) into the fabric. It does not necessarily mean going back to the earliest stage of construction or even to one date for the entire place. Reconstruction is associated with recapturing the expression of the place at points in history which are either important or at which the place demonstrated a greater functional clarity or design expression. This is not to be confused with either re-creation or conjectural reconstruction, which are outside the scope of The Burra Charter.
- **Adaptation** means modifying a place to suit proposed compatible uses.

- **Compatible uses** means a use which involves no change to the culturally significant fabric, which are substantially reversible, or changes which require minimal impact.
- **Demolition** is confined to actions which reveal structures or relationships of much greater significance than the structure demolished, or that will remove intrusions which reduce the significance of the place. At times demolition may be considered if portions of the site can be opened for new construction that will facilitate the successful adaptation of the more significant components.

### 17.1.3 Principles for Fabric, Features and Artefacts of Differing Levels of Interpretative Potential.

The conservation planning process, which is outlined within this CMP, has as its guiding principle, to protect and conserve the elements or features that most clearly interpret and make a contribution to significance.

This is not a graded significance but a graded ability to interpret significance, as outlined for individual elements in **Table 7**.

The following policy recommendations establish a framework for a more detailed level of conservation planning work. It is not the role of this CMP to grade the components of individual buildings or other features in order to formulate detailed conservation policies for individual components and elements.

- Conservation activities should not focus on components that have a higher interpretative potential at the expense of lesser elements. The nature of the site as an integrated cultural landscape means that components of all levels of interpretative potential make a contribution to the nature and complexity of the place.
- In general, future change should be focussed on areas or components, which provide a lesser contribution to overall interpretative potential and are therefore less sensitive to change.
- Identified fabric, features and associated artefacts of **High Interpretative Potential** should be conserved, through retention and interpretation. The appropriate conservation objectives and processes are maintenance, preservation and restoration. Limited or minor reconstruction is acceptable if there has been a minor loss of integrity.
- Adaptation of fabric and spaces considered to be of **High Interpretative Potential** is acceptable if the change of use is compatible to the physical characteristics of the space, can be achieved without loss of significant fabric and does not degrade the overall significance of the building or complex.
- Identified fabric, features and associated artefacts of **Medium Interpretative Potential** should be conserved, through retention and interpretation. The appropriate conservation objectives and processes are maintenance, preservation and restoration. Limited or minor reconstruction is acceptable if there has been minor loss of integrity.

- Adaptation or alteration work to fabric or spaces of **Medium Interpretative Potential** is acceptable if the change of use is compatible to the physical characteristics of the space, can be achieved with only minor loss of significant fabric and does not degrade the significance of the building or complex.
- Identified fabric, features and associated artefacts of **Low Interpretative Potential** should be either conserved, through retention and interpretation, or recorded prior to adaptation or removal.

**Table 7. Assessment of Interpretative Potential and Re-Use Possibilities.**

Number	Name	Area m <sup>2</sup>	Interpretative Potential	Flexibility	Reuse possibilities
<b>Original Establishment Precinct</b>					
1	Dockyard Police Office	20?	High	Low	Administration & management/education
2	Timekeepers Office	39	Medium	Medium	Amenity/ administration/ management/ education
3	Garage and fire store	39	Medium	Low	Amenity/ administration &management/ education
4	Canteen	310	Medium	High	Accommodation/ education/canteen/ exhibition
5	Change room/toilets	214	Low	Medium	Education/toilet/ amenity
6	Office	247	Medium	High	Accommodation/ administration/ management/ education
7	Explosives Storehouse	30	High	Low	Storage
8	Explosives Storehouse	222	High	High	Interpretation/Storage/ Performance/ Exhibition
9	Toilet		Low	Low	Toilet/amenity
12	Wharf Transport Office	10	High	Low	Administration/ commercial
13	Store	62	Medium	Medium	Interpretation/ administration/ commercial
15	Return store	48	High	Medium	Rail terminus/Storage/ commercial
19	Riggers store	13	Low	Low	Storage
20	Gun Powder	224	High	Low	Interpretation/



Number	Name	Area m <sup>2</sup>	Interpretative Potential	Flexibility	Reuse possibilities
	Magazine				Performance/ Exhibition
21	Explosives storehouse	16	High	Low	Storage
22	Non-explosives store	144	Medium	Medium	Storage/Performance & Exhibition
24	Smoke float store	258	Low	High	Maintenance/ Operational
25	Stencil and toolroom	36	Low	Low	Maintenance/ Operational
26	Stables	36	Low	Low	Maintenance/ operational
83	Sailmakers store	20	Medium	Medium	Office/food outlet/maintenance/ operational
105	Training centre	106	Low	Medium	Accommodation/classes/ administration & management/ education
115	Toilet		Low	Low	Toilet/ Amenity
116	Time clock race	18	Medium	Low	Interpretation
117	Toilet/ Ablution Block		Low	Low	Toilet/Amenity
118	Residence	117	Medium	High	Administration/ management
121	Electrical substation		Low	Low	None
123	Residence	88	Medium	High	Offices/ program-related residential/cultural
125	Gardener's Workshop/ toilet		Low	Low	Toilet/Amenity
126	Residence	126	Medium	High	Program-related residential /offices/ cultural
138	Storeman's office		Medium	Low	Storage/Administration /commercial
139	Residence	47	High	High	Accommodation/ Administration/ Commercial
140	Explosives workroom	38	High	Low	Interpretation/ Exhibition
141	Explosives workroom	14	Low	Low	Toilet/Amenity/Ablution /Administration/ Commercial
142	Explosives packing room	12	High	Medium	Storage/Offices/ Interpretation/Exhibition



Number	Name	Area m <sup>2</sup>	Interpretative Potential	Flexibility	Reuse possibilities
143	Gatehouse	31	High	Low	Interpretation/ Exhibition
144	Explosives workroom	31	High	Medium	Interpretation/ Administration/ Commercial
145	Explosives workroom	31	High	Medium	Storage/ Administration/ Commercial
146	Explosives workroom	18	High	Low	Storage/ Administration/ Commercial
147	Compressor room		Low	Low	None
148	Toilet block	13	Low	Low	Toilet/Amenity
149	Naval police office	8	Medium	Low	Security/Storage
150	Electromobile garage	25	Medium	Low	Railway/Transport
151	Electromobile workshop	30	Medium	Low	Railway/Transport
152	Transformer room		Low	Low	Railway/Transport
198	Liquids store	19	Low	Low	Storage
200	Toilet block	17	Low	Low	Toilet
235	Light railway		High	Low	Transport
236	Wharf		High	Low	River Transport/ Public Access
237	Burma road		Medium	Low	Transport (road)
241	Avenue and gateposts		High	Low	Transport (footpath)
242	Footings of fence		High	Low	Interpretation
<b>Early Naval Occupancy Precinct</b>					
16	Detonator Storehouse	10	High	Low	Interpretation/ maintenance/ operational
18	Explosives Storehouse	473	High	Medium	Education/training centre/workshop/ Performance/ Exhibition
28	Office	54	Low	Medium	Information/Food Outlet
29	Toilet	6	Low	Low	Toilet/Amenity
30	Empty Package Store	1128	Medium	High	Education/Training centre/Railway/

Number	Name	Area m <sup>2</sup>	Interpretative Potential	Flexibility	Reuse possibilities
					Transport
32	Toilet		Low	Low	Toilet/Amenity
33	Explosives storehouse	130	Medium	High	Education Display
34	Pyrotechnic store	63	Medium	High	Education Display/Interpretation /Exhibition
35	Explosives Storehouse	62	Low	Medium	Education /Office
36	Explosives magazine	21	High	Low	Interpretation/Education /Program-related Residential
37	Explosives magazine	21	High	Low	Office/Education /Program-related Residential
38	Explosives magazine	72	High	Medium	Studio/Art Display/Education /Program-related Residential
39	Magazine	216	Medium	Medium	Railway/Transport
41	Toilet		Low	Low	Toilet/Amenity
127	Warhead Examining room	12	High	Low	Interpretation/ Administration/ Commercial
128	Shell scraping room	13	High	Low	Interpretation/ Education
129	Shell marking room	56	Low	Medium	Offices/ Education
154	Soldering room	21	Low	Medium	Toilet/Education/ Program-related Residential
155	Shell examining room	14	High	Low	Interpretation/ Education/ Program-related Residential
156	Shell examining room	14	High	Low	Office/Education/ Program-related Residential
157	Shell examining room	14	High	Low	Office/Education /Program-related Residential
158	Explosives workshop	15	High	Low	Storage/Education /Program-related Residential
159	Explosives	15	High	Low	Education/Program-

Number	Name	Area m <sup>2</sup>	Interpretative Potential	Flexibility	Reuse possibilities
	workshop				related residential
160	Office	13	Low	Low	Equipment
161	Amenity block		Low	Low	Toilet/Education
163	Office		Low	Low	Education/ Program-related Residential
164	Explosives workshop	12	Low	Low	Interpretation
190	Heat test room	22	Medium	High	Education/ Office/Maintenance /Operational
191	Colour test room	9	Low	Low	Storage/Equipment
192	Proof house	55	Medium	Medium	Education/Office
193	D.A. Proof house	4	Low	Low	Equipment/ Education
194	Toilet	6	Low	Low	Toilet/Amenity
196	Water tower		High	Low	Interpretation
200	Toilet		Low	Low	Toilet/Amenity
243	Road between woodland & wetland		High	Low	Transport (road)
244	Foreshore road		High	Low	Transport (bicycle, footpath)
247	Trollies & electromobile		High	Medium	Transport (light rail)
<b>RAN Wartime Expansion Precinct</b>					
31	Explosives Storehouse	29	High	Low	Education Interpretation/ Exhibition
42	Explosives Storehouse	279	High	High	Interpretation/ Education
43	Explosives Storehouse	279	High	High	Commercial Storage/Education
44	Explosives Storehouse	279	High	High	Education
45	Explosives Storehouse	279	High	High	Commercial Storage/Education
46	Explosives Storehouse	638	High	High	Commercial Storage/Education/ Cultural
47	Explosives Storehouse	638	High	Medium	Commercial Storage/

Number	Name	Area m <sup>2</sup>	Interpretative Potential	Flexibility	Reuse possibilities
					Equipment/Railway/Transport
130	Explosives Workshop	33	High	High	Studio/Workshop/Education/Interpretation/Exhibition
131	Explosives Workshop	33	High	High	Studio/Workshop/Education/Interpretation/Exhibition
132	Explosives Workshop	33	High	High	Studio/Workshop/Education/Interpretation/Exhibition
133	Office		Medium	High	Office/Admin/Studio/Education
134	Electromobile Garage	15	High	Low	Railway/ Transport
135	Toilet Block		Low	Low	Toilet
136	Toilet Block		Low	Low	Toilet
199	Toilet Block		Low	Low	Toilet
245	Louise Sauvage Pathway		Low	Low	Transport (bicycle, footpath)
246	Burning Ground		Medium	Low	Interpretation
<b>US Navy Utilisation Precinct</b>					
50	Joiners Shop	54	Medium	High	Maintenance/operational sculpture studio
51	Timber store	31	Low	Low	Maintenance/Operational
56	Explosives Storehouse	202	High	Low	Interpretation
57	Explosives Storehouse	202	High	Low	Storage
58	Explosives Storehouse	202	High	Low	Storage
59	Explosives Storehouse	202	High	Low	Storage
60	Explosives Storehouse	202	High	Low	Storage
78	Explosives Storehouse	202	High	Low	Storage
79	Explosives	202	High	Low	Interpretation/

Number	Name	Area m <sup>2</sup>	Interpretative Potential	Flexibility	Reuse possibilities
	Storehouse				Exhibition
113	Workshop/garage	513	Low	Medium	Administration/ Management /Maintenance/ Operational/ Interpretation/ Cultural
122	Residence	126	Medium	High	Accommodation/ Administration/ Management
206	Joiners Store		Low	Low	Tool shed
207	Naval Police Fire Store		Medium	Low	Tool shed
208	Naval Police Fire Store		Medium	Low	Tool shed
209	Naval Police Fire Store		Medium	Low	Tool shed
211	Sailmakers Shop		Low	Low	Sculpture studio/ Storage
233	Fitters Workshop		Low	Low	Sculpture studio/ Maintenance/ Operational

## 17.2 Preparation of Additional Conservation Plans

- Where required the Authority will prepare detailed conservation plans for individual buildings and site features that responds to the relative contribution that each makes to the overall significance and interpretative potential of the place. (See **Part F Implementing the Plan** for further details).
- Where Individual Conservation Plans are nominated for specific buildings and elements, any conservation or adaptation works, with the exception of those works listed in the exemptions set out in **section 22.9**, will be preceded by the preparation of a Individual Conservation Plan for that building or item. The completed Individual Conservation Plan will be submitted for endorsement from the NSW Heritage Council.
- Where Collective Conservation Plans are nominated for groups of buildings or elements, any conservation or adaptation works to one or any of the buildings within the group, with the exception of those works listed in the exemptions set out in **section 22.9**, will be preceded by the preparation of a detailed but typical Collective Conservation Plan for the buildings or items within that group. The completed Collective Conservation Plan will be submitted for endorsement from the NSW Heritage Council.
- Where Concise Conservation Reports are nominated for buildings, groups of buildings or elements any conservation or adaptation works, with the exception of those works listed in the exemptions set out in section 22.9, will be preceded by the preparation of a Concise Conservation Report which establishes the basis for the work, but is not as detailed as the above mentioned conservation plans (individual and collective)
- The content and coverage of issues within both the Individual and Collective Conservation Plans and the Concise Conservation Reports, will be in accordance with the outlines contained in **Part F Implementing the Plan**.

## 17.3 Conservation of Significant Characteristics

- The Authority will approach the conservation, adaptation and maintenance of the various buildings, site infrastructure and landscape settings of the site with the general principle to “do as little as possible, but all that is necessary”.
- In general, evidence of the progressive evolution of individual buildings, groups of buildings or other features, throughout the operational life of the Armament Depot, will be respected and retained.

## 17.4 Initial Maintenance Works

- The Authority has implemented an initial maintenance program to ensure that deterioration of building fabric resulting from decayed materials or delayed maintenance programs is minimised, during 2001 and 2002, prior to the site’s listing on the State Heritage Register.

- All initial maintenance works were reviewed by a suitably qualified conservation architect and carefully implemented to minimise adverse impacts on significant features.

Refer to the Schedule of Initial Maintenance in **Part F, Implementing the Plan** for a detailed itemisation of works carried out under this initial maintenance program.

### **17.5 General Conservation of Significant Fabric**

- Materials such as face brick, stone, off-form concrete, terra cotta and slate, which were not originally painted, will remain unpainted.
- Materials such as timber or metal work which were originally painted, and for which an effective paint system is an integral part of their preservation, will remain painted.
- A structural assessment and survey for termite activity will be undertaken of all buildings to identify future conservation and repair requirements.
- Where possible, deteriorated building fabric will be repaired rather than replaced. If replacement is necessary, the new work will be based on the existing or historical evidence rather than conjecture.
- Detailing of the buildings and other features that specifically illustrates their operational use, such as ventilation, spark protection, lightning rods, security measures, signage, fittings and fixtures, will be conserved in situ.
- Original timber, parquetry and concrete floors within buildings will be retained and conserved where possible. Damaged or removed sections of flooring will be replaced to match the existing.
- The internal rendered or plastered walls will be retained and conserved, where possible.
- Conservation works will not directly reconstruct faulty building detailing or inadequate earlier repairs, if to do so will continue the process of accelerated deterioration of significant building fabric.
- Intervention into the building fabric for non-conservation purposes will generally be restricted to programs of research, re-use or upgrading of service areas and facilities.

### **17.6 Retention of Significant Internal Spaces**

- The spatial characteristics of individual buildings, particularly where this is closely related to historical operational requirements, will generally be retained or interpreted.
- The internal spaces and spatial characteristics of the explosives warehouses, examining rooms and workshops will generally be retained. Any subdivision of these spaces will reflect any evidence of historical subdivisions and be reversible, with minimal impact on the fabric of the building.

### **17.7 Reinstatement of Missing Fabric**

- Reinstatement or reconstruction of missing fabric will only occur where there is sufficient documentary or physical evidence, where it will contribute to the significance or interpretation of the item or where it is essential to the continuity and conservation of the particular building or item.

### **17.8 BCA and Access Compliance**

- Approaches to compliance with the *Building Code of Australia* (BCA), for the conservation and re-use of heritage buildings, will focus on the spirit and intent of the requirements or standards, where strict compliance will adversely affect the significance. The key issues relating to compliance are fire resistance and egress provisions.
- Compliance strategies for easy access requirements and public safety will be carefully considered and integrated into individual buildings or other site features to minimise impact on significance. Alternative interpretation or re-use proposals will be considered where compliance will adversely affect significant fabric or features or ecological integrity of the landscape.

### **17.9 Conservation of Moveable Heritage Items**

- The Authority will undertake an inventory of the moveable heritage that is associated with the site and owned by the Authority, as the basis for the formulation of a Collections Conservation Plan.
- The Authority will undertake research and documentation to establish provenance, function, history and associations of the moveable heritage collection under their ownership, with particular buildings or items.
- All remnant artefacts and moveable heritage items, such as equipment, furniture and signage, will be retained, interpreted and conserved on the site and in their original locations, where possible.
- The Authority will undertake to return the moveable items to their associated buildings or structures where appropriate for interpretation.
- The moveable heritage collection will be conserved in accordance with the requirements of the *Heritage Amendment Bill 1998*, and the relevant publications by the NSW Heritage Office.

### **17.10 Recording**

- The Authority will ensure that the measured drawing survey completed by Brian McDonald and Associates is available for all approved research, maintenance and conservation and adaptation programs.



- The Authority will undertake a periodic photographic and written recording of the buildings, site elements and context, in order to build up a comparative database for monitoring their condition. The initial recording process will be supplemented at times of conservation works to specific buildings and other items or when major adaptation programs are proposed.
- The Authority will ensure that any recording work meets the guidelines established by the NSW Heritage Office.
- Should any building or site element be demolished or removed, under approved programs of re-use, a photographic recording of the existing state will be undertaken prior to the commencement of any demolition work.

### **17.11 Managing the Documentary Material**

- All relevant documentary recording materials will be stored safely within the MPHP site management offices or the Authority's Library. Relevant copies will be made available to the State Library.
- The Authority will liaise with Defence archives to arrange for copies of relevant documentary material to be held at the MPHP.

### **17.12 Conservation Skills and Experience**

- Appropriate conservation skills and experience will be available within the project team assembled to deal with the conservation and re-use of the Precinct.
- Appropriate professional skills and experience assembled to work on the detailed conservation of the buildings could include conservation architects, landscape architects, archaeologists, structural engineers, remediation specialists, building code compliance advisers and cost planners as appropriate.
- Building contractors, project managers and trades personnel who are experienced with working on historic buildings will be selected to work on the proposed works.

### **17.13 Hazardous Materials Removal**

- In general hazardous materials will be removed from the building where they are considered to pose a threat to occupants or workmen. Removal will only take place within a program of conservation and re-use and will be done in ways that minimise the impact on heritage significance.
- Prior to commencing of any work, a thorough check to identify any hazardous materials will be undertaken.
- Removal of hazardous material will be carried out by the relevant professionals observing the proper safety precautions.

- Hazardous materials that are removed but whose presence is an important contributor to the architectural character of the buildings will be replaced with safe materials that are similar in appearance, where possible.

#### **17.14 On-going Maintenance**

- The primary objectives of the maintenance program for MPHP will be to “do as little as possible, but all that is necessary”, to retain and stabilise the existing building fabric, retard deterioration and avoid the need for extensive capital repairs in the long term.
- Maintenance inspections and activities will meet the minimum standards for maintenance and repair established by the NSW Heritage Office, with regard to weatherproofing, fire protection, security and essential maintenance.
- Maintenance of the building fabric will be undertaken on a planned cyclical basis, with each item on a cyclical timetable according to its potential rate of deterioration.
- Cyclical maintenance inspections will also monitor the impact on significant fabric of general building conservation programs and cultural tourism activities.
- Works that involve access to the roof cavity of buildings within the Woodland, and on land located immediately adjacent to the Woodland, will be wherever possible conducted and timed to avoid impacts on the roosting and breeding of microchiroptean bats. [Note: These buildings currently house the only known Sydney breeding sites of several species of microchiroptean bats. A program of providing alternative roost and breeding structures has commenced, with the objective of reducing their reliance on these buildings.]

## **18.0 Historical Archaeological Resources**

- The archaeological potential of the MPHP site will be recognised as an integral part of the cultural significance of the site.
- The Authority will ensure an Archaeological Assessment is undertaken and if required a Historical Archaeological Zoning Plan is prepared for the site, and integrated into the management processes and planning procedures.
- Any identified archaeological resources will be conserved and managed in accordance with the recommendations arising from the Archaeological Assessment.
- If required the Historical Archaeological Zoning Plan will be prepared as a prelude to any development works that may involve sub-surface disturbance, in particular the construction of new buildings or underground infrastructure.
- The Authority will ensure that any Historical Archaeological Assessments undertaken take due consideration of Aboriginal cultural heritage and be in a compatible format to incorporate the findings of an Aboriginal Cultural Heritage Assessment.
- Prior to the commencement of any excavation in an area in which relics are likely to be found, an archaeological assessment will be undertaken in accordance with the NSW Heritage Office guidelines.

## **19.0 Conservation Policies for Adapting Buildings to New Uses**

### **19.1 The Concept of a Shared Resource**

- Use and re-use of the MPHP or of individual buildings and other features will be based on the principle of a shared resource. Shared resources may include components of the overall landscape, means of access, particular buildings or facilities that have been adapted for new uses, management structures, promotional, research, education, interpretation and visitor management programs.
- Various sections of the place will not be divided off for the exclusive use or occupancy of a particular interest group and developed without consideration of the significance of the place.
- Individual buildings or other features may be licensed, leased or otherwise contracted for specific purposes or by specific user groups, no actual components of the place will be isolated from the whole in terms of the ability of people to move around in a well managed way.

### **19.2 Re-use or Interpretation**

(See **Table 7 Assessment of Interpretative Potential and Re-Use Possibilities** at section 17.1.3 for list of re-use possibilities)

- Conservation management of the MPHP will be in the context of compatible re-use, adapting the complex and its cultural landscape to new conservation directions.
- Interpretation of the significance of the place is an essential component of its conservation and re-use. Prior to the selection of appropriate new uses for any particular building or item consideration will be given to its potential role within the interpretation of the significance of the MPHP.
- A representative example of buildings and other features, will be allocated for interpretative purposes, prior to the finalisation of re-use proposals.

### **19.3 Selection of Appropriate New Uses**

- The selection of appropriate new uses will be consistent with Parklands 2020 and the Parklands Plan of Management, in particular, the appropriate uses and activities that are identified in the Plan of Management.

## **19.4 Re-use before the Development of New Buildings**

- The re-use potential of the existing buildings and other features on the site will be given priority over the construction of new buildings and other facilities.

## **19.5 General Re-use Guidelines**

- Adaptation of a building's interior will ensure that the original fabric or significant architectural and spatial features are retained and interpreted to the greatest extent possible.
- The design of any internal alterations and additions will be minimal in extent and compatible with the scale, integrity and character of the individual building. Alterations and additions will be completed in such a manner that if they were to be removed in the future, the essential form and integrity of the earlier structure would be unimpaired or easily retrieved.
- Subdivision of larger internal spaces will be undertaken in a secondary manner, using such items as partitions that can eventually be removed and which do not cut into the existing finishes or detailing.
- External alterations or additions to existing buildings will be discouraged. However if required to meet approved interpretation, re-use or cultural tourism requirements or BCA requirements, they will be of a minor nature, subservient to the primary architectural features and composition of the existing building.
- Newly installed or upgraded external plant, equipment and services will not unnecessarily disrupt the general architectural characteristics of the building. Window mounted air-conditioners will not be permitted.
- Services will be concealed wherever possible. Existing or old service chases or conduits will be re-used in preference to new chases. Services will be rationalised, grouped and treated to minimise intrusion.

## **20.0 Policies for Interpreting Significance**

### **20.1 Core Interpretation Principles**

- The Authority will ensure the preparation and implementation of a site specific Interpretation Plan for the MPHP site that makes the natural and cultural significance of the site accessible to visitors and others.
- The Authority will ensure the preparation of Interpretation Statements for individual places, buildings, items, collections of buildings or other aspects of the site.
- Individual precinct or building interpretation plans will take into account the wider cultural contexts identified in the CMP.

### **20.2 Making Significance Accessible to the Public**

- Interpretation programs will provide equitable and balanced views of the significance of the site to all stakeholders regardless of their age, physical capacities, nationalities or gender.
- Interpretation will through the use of multimedia and other technologies, endeavour to provide physical, intellectual emotional and spiritual access to the significance and history of the site.
- The Authority will endeavour to ensure that all interpretation is based on the most accurate and insightful information and historiography available.
- The primary emphasis of the Cultural/Historic Heritage interpretation program will be the evolution of the site from Aboriginal occupation to the present day and the significance of the site to the history of Naval Defence.
- The Authority will ensure that interpretation of the significance of the site will take into account the history of Aboriginal occupation until the present day and the spiritual and social significance of the land to the Aboriginal community.
- Interpretation programs will include the natural landscape settings of the site and the influences of the setting on the nature of development within the site, and the ecological diversity of its natural areas.
- The Authority will interpret the significance of the rail access, explosives storehouses and other Depot operational structures within the wetland and woodland in a manner, which overcomes any limitation on public access due to biodiversity management programs.
- In making significance accessible, the Authority will take into account of the Policies and Guidelines contained within the *ICOMOS International Cultural Tourism Charter*.

### **20.3 Interpretation Practices**

- The Authority will employ, conceive and develop interpretation techniques, which define best practice in heritage presentation.
- The interpretive potential of any building, structure or building element will be a criterion in determining its conservation and re-use.

### **20.4 Programs To Support Interpretation**

- The Authority will implement or co-ordinate an oral history program with the people, whom staffed, lived at or were associated with the operational history of the Armament Depot and Aboriginal association and interaction with the site.
- The Authority will implement or co-ordinate a program of identifying and gathering specific documentary information on the Armament Depot for the development of a site specific Interpretation Plan.

### **20.5 Review of Interpretation Plans**

- The MPHP Interpretation Plan will be reviewed every five years, following the periodic reviews of the Statement of Significance and the CMP and the Parklands Plan of Management.
- Reviews of the Interpretation Plan will take account of any updating of the CMP and shall reflect evolving theory, new evidence and new interpretation techniques.

## **21.0 Policies for Visitor Management**

### **21.1 Limits of Acceptable Change**

- The Authority has established the limits of acceptable change for the site or portions thereof, that may generate restrictions on the maximum number of visitors that should be on the site at any one time. This is set out in the Parklands Plan of Management.
- Tourism planning and development activities will take a long-term view about the eventual levels of popularity and visitor numbers. Short-term solutions will be avoided if they are likely to generate visitor numbers or behaviour, which will have a negative or unsustainable impact if and when high numbers are actually achieved.
- Adequate and appropriate on-site supervision and visitor management programs will be available to enhance the visitor experience through guided tours and interpretation.
- The Authority will undertake to institute a tourism/interpretation/code of conduct plan with tourist and commuter ferry operators to make them aware of the fragility of the wetland and the significance of the site.

### **21.2 Management of Visitor Expectations**

- All promotional material about the site will accurately and adequately identify the heritage significance, nature and physical limitations of the place.
- Promotional programs will engender realistic expectations in the mind of the visitor prior to the visit.
- The initial encounters with the site, by way of signage, entry gates or other “barriers”, will be designed and constructed to enhance the visitor experience.
- The Authority will make the visitor aware of the need for restricted access to parts of the site and the need for restricted access hours.

### **21.3 Preparation of Site Tourism Plan**

- The Authority will develop a site specific Tourism Plan for the MPHP site.
- The Tourism Plan will be prepared in a consistent and co-ordinated manner with the CMP.
- The most suitable range of short, medium and long term visitor attractions that should be developed for the site will be determined, including the compatible re-use of buildings for either interpretation or tourism activities, appropriate visitor facilities, retail opportunities and supporting infrastructure.



- A community relations plan will be developed which can involve the local population in a regular series of cultural activities or events that will raise the profile of the MPHP and promote its role in the economic life and tourism potential of their locality.
- Adequate levels of well trained staff or representatives will be located on site, particularly during periods of high visitation, to greet the visitors and present a good and friendly impression of the Authority's care and management.

#### **21.4 Monitor Tourism Programs**

- A program of collection of visitor records will be implemented to establish an understanding of the size and fluctuating nature of current and longer-term visitation patterns.
- The ways that visitors respond to the site, its attractions and facilities will be monitored with programs and activities adjusted accordingly.

#### **21.5 Provision of Tourism Infrastructure**

- It is recognised that the following items are an important part of the tourism infrastructure for the MPHP, given due consideration to the likely impacts on significant characteristics:
- Good signage and access arrangements, including carparking if appropriate, clearly defined opening times and charges for various components.
- Safe and equitable access to the majority of the precinct, with signage or other arrangements to warn of danger and provide an understanding for those who cannot access certain sections.
- Fresh drinking water and clean toilets.
- A clean and well managed appearance across the entire precinct, including well maintained buildings and no rubbish or litter.
- Seating and rest areas, with reasonable weather protection, particularly where views can be admired.
- A reasonable level of food services, possibly ranging from snacks and cool drinks to cafe style operations at times of high activity.
- Retail outlets for souvenirs and memorabilia.
- Appropriate interpretation material, across a range of media and targeted to a variety of levels of interest.

## 21.6 Management of On Site Visitor Movement

- The Authority shall recognise that the MPHP was a controlled and secure precinct throughout its period of use as an Armaments Depot, and that the site contains a wide variety of valuable physical and historical assets, in addition to the special sense of place that derived from the strong and secure management regime that applied to the site.
- The site will continue to be managed as a secure precinct, fenced as appropriate and be opened to the public only under defined management arrangements.
- Access by the public will generally be under controlled conditions, as part of special programs and activities or during approved events.
- Access to the site from outside will be limited to the existing entry from Jamieson Street, by ferry to the existing wharf, along approved walking or cycle tracks with defined gateways through the security fence, and potentially on foot from the P5 Car Park.
- Transportation around the site will be by foot, bicycle, light rail or small scale buses where part of approved programs.
- Uncontrolled self drive access by visitors, including coaches and private vehicles, including uncontrolled parking will not be permitted.
- Controlled on-site vehicle access and parking will be allowed for the following people:
  - people with disabilities
  - services contractors
  - limited buses and coaches associated with approved programs and tours; and
  - temporary parking in designated areas associated with special approved cultural events and activities, where parking outside the site is not appropriate.



**PART F**

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# **Implementing the Plan**

## 22.0 Implementation

### 22.1 Initial Maintenance Program for historic structures and infrastructure

The MPHP suffered from delayed and deferred maintenance for some years, partly due to the final run-down of Commonwealth programs and partly due to the other priorities faced by the Authority during the preparation for the Sydney Olympic Games. In 2001 and 2002 the Authority was able to identify and allocate reasonably substantial funds for initial maintenance works on the site.

In consultation with Graham Brooks and Associates, Heritage Architects, OCA and subsequently the Authority, was able to implement a program of initial maintenance works that sought to stabilise deterioration and ensure that essential services and stormwater responses across the site were undertaken. In addition the program sought to remove or encapsulate hazardous materials, remedy minor areas of public safety, such as uneven footpaths and open drainage sumps, in order to begin preparing the site for its progressive opening to the public. The light rail system was also repaired and upgraded to prepare it to serve as the primary form of public transport around the site.

All of the works undertaken in this period were maintenance and generally involved replacing like with like, repainting using known colour schemes, and replacing lost items, using the evidence available on site. At times good building practices were implemented to overcome past errors, poor workmanship or poorly executed earlier maintenance programs.

The overall objective of the program was to retard deterioration and protect the heritage significance of the overall site. The success of the program was recognised by a National Trust Heritage Award in 2003.

The following works were included in the initial maintenance program.

#### Schedule of Initial Maintenance in 2001/2002.

- Structural and contamination assessment of the roof structures and asbestos sheeting of all buildings.
- General repainting of external deteriorated painted surfaces in colours that matched the existing.
- Removal of deteriorated or asbestos based gutters and downpipes and replacement in metalwork to match those profiles that reflect the construction period or periods of the individual building.
- Encapsulation of asbestos based roof and wall sheeting, with the exception of material containing blue asbestos, by the application of a paint system that had minimal effect on the colour or appearance of the weathered material.

- Removal of all material containing blue asbestos from the subject building and disposal of in accordance with relevant legislation, Australian Standards and best trade practice. Replacement with corrugated sheet metal that generally responded to the profile and appearance of the original, such as the corrugated blue asbestos roofing to Building 22.
- Replacement of deteriorated corrugated asbestos roof sheeting that cannot reasonably be repaired with corrugated metal sheeting with a colour finish that reflected the generally weathered colour of asbestos roofing across the site.
- Replacement or covering of deteriorated asbestos wall sheeting that cannot reasonably be repaired, with flat sheets of fibre cement based products, of matching scale and pattern, detailed and finished with a paint colour that matched the existing.
- Repair of deteriorated slate roofs, with the associated cappings, roof ventilators, flashings and timber detailing or replacement with matching material and traditional detailing.
- Replacement of missing terracotta chimney pots with pots that closely match the original profiles that survive on the older buildings, or with new matching pots.
- Repair of deteriorated external timber detailing or replacement in matching profiles and section and repainted in matching colours.
- Replacement of broken window glass with material of matching thickness and glazing technique.
- Check, clean and repair of site services such as stormwater drainage, sewerage disposal, water supply, electricity, gas, fire fighting and telephone to ensure their operational efficiency within the current situation.
- Resetting of minor areas of deteriorated concrete or masonry paving where there is a trip hazard to public safety or replacement with matching material.
- Repair of deteriorated areas of bituminous paving wearing surfaces to the road system with matching material.
- Continued landscape maintenance and weed removal across the site, respecting the limitations of the Wetland and Woodland designations and management regimes.
- Re-grading of open watercourse channels to facilitate regular grass mowing, in order to ensure that the surface water flows are not impeded.
- Removal of a small number of oleanders, which are considered to be a risk to public health.
- Minor low level screen planting has been undertaken around the car parking area behind Building 122.

- Removal of recently planted trees on top of the underground US Navy explosives storehouses to minimise long term damage to the structures.
- Maintenance work to the subsoil drainage system to minimise continuing deterioration to structural steel components of the US Navy underground explosives storehouse 79. The lower outer edges of the explosives storehouse was exposed, checked, and the drainage supplemented as required and reburied, given that there is no risk to potential archaeological material in the areas of backfill around each explosives storehouse. Extensive repairs to the deteriorated and heavily rusted steel facade of US Navy explosives storehouse 79. Repainting of the facades at the conclusion of the work, with matching colours whilst retaining or repainting areas of signage.
- Reduction in the angle of repose of the earth embankments to the light rail cuttings to minimise collapse, erosion or drainage problems. The embankments shall be further stabilised with grass.
- Extensive repairs and relaying of track beds and point system along the light rail system, and restoration of whole system to operating condition.
- Maintenance work on rolling stock of light rail and proposal in progress to introduce new rolling stock suitable for public transportation around the site.
- Maintenance of the light rail network in accordance with legislative and OH&S requirements. The stormwater drainage system for the light rail upgraded as required, but in a manner that does not adversely affect the concrete structural bedding.
- Check and repair of spalled concrete in the light rail tunnels.
- Repair and replacement of damaged timbers to the wharf.
- Repair and upgrading of damaged sections of the sea wall along river front.
- Buildings 140, 142 and 143, cast iron gate dismantled and repaired and reinstalled, repair of stonework over entry arch, maintenance of window sashes, replacement of aluminium with timber windows, repair of damaged stonework sills, repainting interior, repair of underlying concrete slab, replace woodblock flooring with matching, relocate existing benches across hatches.
- Building 123, rebuilding verandah using physical and documentary evidence, internal repairs to plaster ceilings timber floors wall finishes damaged joinery and termite infestation, replacement of lost fire place piece.
- Paint removal from face brick work.
- Buildings 118 and 126 internal painting and removal of debris from ceiling and floor spaces, replacement of infested floor timbers, patch plaster and cracking. Strip and check all doors and windows and repair bathroom fittings.

- Buildings 2, 3 4 5 105, 118, 197: installation of furniture, computer cabling and additional power outlets, fittings and fixtures to suit adaptation to environment education centre.
- Repairs and repainting of fire hydrant covers.
- Installation of external disabled access ramps to Buildings 5 and 105.

## **22.2 Priorities and Staging**

Works required to manage the landscape, conserve the buildings and site infrastructure, and open up cultural tourism opportunities will occur over the next few years, within the context of the Parklands Plan of Management.

In general the Authority will need to prioritise the potential activities to suit available resources. Some programs can be implemented quickly, while others will take some time to reach fruition or to become consolidated in the marketplace. The recommendations set out in this CMP have been prioritised into Short and Long Term actions.

This section sets out the implementation of the conservation, management and interpretation policies contained within this CMP.

### **22.2.1 Short Term Activities**

Short-term activities are those which can and need to be completed within one to two years. They include building and site maintenance, early planning work and assessing the feasibility of longer-term opportunities for the complex.

### **22.2.2 Long Term Activities**

Long term activities are those which can or should be undertaken within the next five years.

They recognise that some actions need to be planned and evaluated before they can be implemented, or will take a while to get started, given the available financial resources.

They also include the on-going management and monitoring programs that will consolidate MPHP as a valuable resource for the Authority.

## **22.3 Management Implementation**

### **22.3.1 Short term**

- Review and endorse this CMP.
- Refer this CMP to NSW Heritage Council for its endorsement and its referral to the Minister for Infrastructure, Planning and Natural Resources for approval.



- Liaise with NSW Heritage Council regarding the State Heritage Register listing for the MPHP.
- Prepare a Development Plan for the MPHP to guide the development as an integral component of Parklands, in a manner that responds to the findings and recommendations of this CMP.
- Refer the CMP to the AHC and National Trust of Australia (NSW) for information.
- Continue to consult with representatives of the MLALC, NPWS and other relevant stakeholders on Aboriginal heritage resources.
- Where required, commission appropriate Individual and Collective Conservation Plans for selected buildings on the site as re-use options emerge.
- Commission an Archaeological Zoning Plan and an Aboriginal Heritage Assessment.
- Commission a natural and cultural heritage Interpretation Plan.
- Maintain existing security regimes.
- Manage the MPHP in accordance with the Parklands Plan of Management.

### **22.3.2 Long Term**

- Confirm with the NSW Heritage Office that the precinct can be managed in accordance with this CMP, without any further reference.
- Refer development proposals, where relevant to the NSW Heritage Office.
- Implement interpretation of the precinct, and encourage managed visitor access.
- Seek to ensure funding for recurrent long-term maintenance is made at the appropriate time.
- Ensure that any funding raised by the precinct is available for its conservation management.
- Develop and implement a staged program for the realisation of long term re-use opportunities.
- Ensure long term security of the precinct.
- Manage the MPHP in accordance with the Parklands Plan of Management.

## **22.4 Conservation Planning**

In accordance with the Conservation Policies, there are three levels of analysis and conservation planning that shall be undertaken for the various historic buildings and structures on the MPHP site.

The three levels are as follows:

- Individual Conservation Plans;
- Collective Conservation Plans; and
- Concise Conservation Reports.

An outline of the depth of information required for additional conservation plans and reports is contained in the following sections. Given that there is a very large number of buildings and items on the MPHP site, these future plans should be brief and concise to manage the flow of information.

In particular cases it may be necessary to go into greater depth of research, analysis or reporting within the conservation plans to fully cover the issues and provide appropriate recommendations.

All Conservation Plans and Reports will be prepared in consultation with experienced conservation practitioners.

## 22.5 Contents for Individual Conservation Plans

Section	Subsections	Contents	Approximate Size
Section 1.		History of building/feature in relationship to history presented in this CMP.	300 words
Section 2.		Assessment of significance of building/feature in relation to overall significance of the site	250 words
Section 3		Assessment of significant characteristics of item.	
	Section 3.1	Description	50 words
	Section 3.2	Condition	150 words
	Section 3.3	Fabric	100 words
	Section 3.4	Integrity	50 words
Section 4.		Chronology of historic function and changes to fabric	150 words
Section 5.		Analytical description of building/feature	
	Section 5.1	Construction techniques	100 words
	Section 5.2	Technological details	100 words
	Section 5.3	Signage, fixtures and associated structures	50 words
Section 6.		Condition and integrity	100 words
Section 7.		Assessment of re-use/ interpretation/adaptation options of CMP against findings of Sections 2 and 6.	200 words
Section 8.		Assessment of fabric conservation policies of CMP for the building/feature against findings of Sections 2, 4, 5 and 6.	200 words
Section 9.		Formulation of conservation policies for building/feature with regard to Sections 7 and 8.	200 words
Section 10.		Formulation of re-use/ interpretation/adaptation policies for building/feature with regard to Sections 7 and 9.	200 words
Section 13.		Formulation of detailed policies regarding conservation of significance and fabric of building/feature, in regard to Section 9.	200 words
Section 14.		Formulation of detailed	200 words

Section	Subsections	Contents	Approximate Size
		policies regarding re-use/interpretation/adaptation of building/feature, in regard to Section 10.	
Section 15.		Formulation of an interpretation plan for the building/feature	200 words
Section 11.		Measured drawings to be completed of interior and exterior if not included in McDonald study.	
Section 12.		Photographic recording of interior and exterior	

### 22.5.1 Items subject to Individual Conservation Plans

#### Original Establishment Precinct

1. Building 18 Explosives Storehouse
2. Building 20 Original Gunpowder Magazine
3. Building 118 Early Residence (with Building 200)
4. Building 123 Early Residence
5. Building 126 Early Residence
6. Building 139 Early Residence

## 22.6 Contents for Collective Conservation Plans

Sections	Sub sections	Contents	Approximate Size
Section 1.		History of buildings/features in collection, in relationship to history presented in this CMP.	300 words
Section 2.		Assessment of significance of buildings/features in relation to overall significance of the site	250 words
Section 3		Assessment of significant characteristics of buildings/features.	
	Section 3.1	Description	150 words
	Section 3.2	Condition	150 words
	Section 3.3	Fabric	100 words
	Section 3.4	Integrity	100 words
Section 4.		Chronology of historic function and changes to fabric of buildings/features.	200 words
Section 5.		Analytical description of buildings/features	
	Section 5.1	Construction techniques	200 words
	Section 5.2	Technological details	200 words
	Section 5.3	Signage, fixtures and associated structures	100 words
Section 6.		Condition and integrity	400 words
Section 7.		Assessment of re-use/ interpretation/adaptation options in CMP against findings of Sections 2 and 6.	200 words
Section 8.		Assessment of fabric conservation policies of CMP for the buildings/features, against findings of Sections 2,4, 5 and 6.	200 words
Section 9.		Formulation of conservation policies for collection with regard to Sections 7 and 8.	200 words
Section 10.		Formulation of re-use/ interpretation/adaptation policies for collection with regard to Sections 7 and 9.	200 words

## **22.6.1 Buildings subject to Collective Conservation Plans**

### **Original Establishment Precinct (OEP)**

#### 1. OEP Explosive Storehouses Collective Conservation Plan

Building 7 Explosives Storehouse  
Building 8 Explosives Storehouse  
Building 21 Explosives Storehouse

#### 2. OEP Gatehouse Group Collective Conservation Plan

Building 142 Explosives Packing Room  
Building 143 Original gatehouse  
Building 147 Compressor  
Building 148 Toilet Block

#### 3. OEP Explosives Workshops Collective Conservation Plan

Building 140 Explosives Workroom  
Building 141 Laboratory Office  
Building 144 Explosives Workroom  
Building 145 Explosives Workroom  
Building 146 Explosives Workroom

#### 4. OEP Electromobile Workshops Collective Conservation Plan

Building 150 Electromobile Garage  
Building 151 Electromobile Workshop  
Building 152 Transformer Room

### **Early Naval Occupancy Precinct (ENOP)**

#### 5. ENOP Pre-war Explosives Storehouse Collective Conservation Plan

Building 36 Explosives Magazine  
Building 37 Explosives Magazine  
Building 38 Explosives Magazine

#### 6. ENOP Pre-war Inspection Workshops Collective Conservation Plan

Building 127 Warhead Examining Room  
Building 128 Shell Scraping Room  
Building 129 Shell marking Room

#### 7. ENOP Pre-war Testing Workshops Collective Conservation Plan

Building 155 Shell Examining Room  
Building 156 Shell Examining Room  
Building 157 Shell Examining Room  
Building 158 Explosives Workshop  
Building 159 Explosives Workshop

#### 8. ENOP Proofing Buildings Collective Conservation Plan

Building 190 Heat Test Room

Building 191 Colour Test Room  
Building 192 Proof House  
Building 193 Proof House

**RAN Wartime Expansion Precinct (WEP)**

9. WEP WWII Brick Explosives Storehouses Collective Conservation Plan

Building 42 Explosives Storehouse  
Building 43 Explosives Storehouse  
Building 44 Explosives Storehouse  
Building 45 Explosives Storehouse

10. WEP WWII Large Explosives Storehouses Collective Conservation Plan

Building 46 Explosives Storehouse  
Building 47 Explosives Storehouse

11. WEP Pre-war Workshops Collective Conservation Plan

Building 130 Explosives Workshop  
Building 131 Explosives Workshop  
Building 132 Explosives Workshop  
Building 133 Office  
Building 135 Toilet Block  
Building 136 Toilet Block

**US Navy Utilisation Precinct (USN)**

12. USN Masonry Front Storehouses Collective Conservation Plan

Building 56 USN Explosives Storehouse  
Building 57 USN Explosives Storehouse  
Building 58 USN Explosives Storehouse  
Building 59 USN Explosives Storehouse

13. USN Steel Front Storehouses Collective Conservation Plan

Building 60 USN Explosives Storehouse  
Building 78 USN Explosives Storehouse  
Building 79 USN Explosives Storehouse

## 22.7 Contents for Concise Conservation Reports

Sections	Subsections	Contents	Approximate Size
Section 1.		History of building/feature in relationship to history presented in this CMP.	150 words
Section 2.		Assessment of significance of building/feature in relation to overall significance of the site	200 words
Section 3		Assessment of significant characteristics of item.	
	Section 3.1	Description	50 words
	Section 3.2	Condition	150 words
	Section 3.3	Fabric	100 words
	Section 3.4	Integrity	50 words
Section 4.		Chronology of historic function and changes to fabric	150 words
Section 5.		Analytical description of building/feature	
	Section 5.1	Construction techniques	100 words
	Section 5.2	Technological details	100 words
	Section 5.3	Signage, fixtures and associated structures	50 words
Section 6.		Condition and integrity	200 words
Section 7.		Assessment of re-use/ interpretation/adaptation options in CMP against findings of sections 2 and 6.	200 words
Section 8.		Assessment of fabric conservation policies of CMP against findings of sections 2,4,5, and 6.	200 words
Section 9.		Assessment of exemption against findings of section 8.	200 words

### 22.7.1 Buildings subject to Concise Conservation Reports

#### Original Establishment Precinct

- |                |                        |
|----------------|------------------------|
| 1. Building 1  | Dockyard Police Office |
| 2. Building 2  | NDP Mess Room          |
| 3. Building 3  | NDP Change Room        |
| 4. Building 4  | Canteen                |
| 5. Building 5  | Change room/toilets    |
| 6. Building 6  | Office                 |
| 7. Building 12 | Wharf Transport Office |
| 8. Building 13 | Store                  |
| 9. Building 15 | Return Store           |



10. Building 19	Riggers Store
11. Building 22	Non Explosives Store
12. Building 24	General Store
13. Building 83	Sailmakers Store
14. Building 105	Training Centre
15. Building 137	Change Room - Toilets
16. Building 138	Storeman's Office
17. Building 198	Flammable Liquids Store
18. Item 241	Stone Gateposts and Fence line base
19. Item 235	Light Railway
20. Item 236	Wharf
21. Item 247	Cranes

#### **Early Naval Occupancy Precinct**

22. Building 16	Acid Storehouse
23. Building 28	Office
24. Building 30	Empty Package Store
25. Building 33	Explosives Storehouse
26. Building 34	Pyrotechnic Store
27. Building 35	Explosives Storehouse
28. Building 39	Magazine
29. Building 154	Soldering Room
30. Building 160	Office
31. Building 161	Amenity Block
32. Building 163	Office
33. Building 196	Water Tower

#### **RAN Wartime Expansion Precinct**

34. Building 31	Explosives Storehouse
35. Building 134	Electromobile Garage

#### **US Navy Utilisation Precinct**

36. Building 50	Joiners Shop
37. Building 113	Workshop Garage
38. Building 122	Residence
39. Building 206	Joiners Store

## **22.8 Buildings for which conservation plans or reports are not required**

### **Original Establishment Precinct**

Building 25	Electrical Workshop
Building 26	Stables
Building 116	Time Clock Race
Building 117	Toilet
Building 121	Substation
Building 149	Naval Police Office
Building 9	Toilet Block
Building 200	Toilet Block
Building 152	Transformer room

### **Early Naval Occupancy Precinct**

Building 164	Workshop
Building 29	Toilet
Building 41	Toilet
Building 194	Toilet
Building 193	Proof Hut

### **RAN Wartime Expansion Precinct**

Building 29	Toilet Block
Building 199	Toilet Block
Building 199	Toilet Block

### **US Navy Utilisation Precinct**

Building 51	Timber Store
Building 207	Naval Police Fire Equipment Store
Building 208	Naval Police Fire Equipment Store
Building 209	Naval Police Fire Equipment Store
Building 211	Sailmakers Shop
Building 233	Fitters Workshop

## 22.9 Exemptions under the *Heritage Act, 1977*

Any major works that are proposed, once the site is listed on the NSW State Heritage Register must be assessed and approved by the Heritage Council to ensure that the heritage significance of the item will not be adversely affected.

In order to achieve efficiencies and focus only on activities that may affect significance, Subsection 57(1) of the *Heritage Act 1977* contains provisions for granting exemptions for certain activities that would otherwise require approval under the Act. These exemptions were revised in February 2003. There are two types of exemptions that can apply to a property.

- Standard exemptions such as building maintenance, minor repairs, alterations to certain interiors and change of use.
- Site specific exemptions that relate to a particular property.

The NSW Heritage Office has prepared a series of guidelines for the identification of those exemptions that can be sought as part of the S60 application process. These guidelines have been utilised in determining the following proposed general exemptions for the MPHP site. The Standard Guidelines issued by the NSW Heritage Office include explanatory notes for the implementation of each Standard Exemption.

The site specific conservation framework developed within this CMP will also be exempt from further reference to the NSW Heritage Council, once this document has been endorsed by the Heritage Council.

The involvement of a heritage professional is required in any decision to apply a further exemption – where this may materially impact the significance of the heritage item – to determine if it is in accordance with the endorsed CMP. Further exemptions are discussed below in section 22.9.1.

### **Standard Exemption No.1, Maintenance**

*1. The following maintenance and cleaning does not require approval under s57(1) of the Act:*

- a) the maintenance of an item to retain its condition or operation without the removal of or damage to the existing fabric or the introduction of new materials;*
- b) cleaning including the removal of surface deposits, organic growths or graffiti by the use of low pressure water (<100 psi at the surface being cleaned) and neutral detergents and mild brushing and scrubbing.*

*Note 1: Traditional finishes such as oils and waxes must continue to be used for timber surfaces rather than modern alternative protective coatings such as polyurethane or acrylic which may seal the surface and can cause damage.*

*Note 2: Surface patina which has developed on the fabric may be an important part of the item's significance and if so needs to be preserved during maintenance and cleaning.*

Typical maintenance works covered by this exemption shall include:

- Cleaning generally, as well as cleaning out gutters, drainage systems, and other water storage and drainage areas;
- Re-securing loose elements of roofs, timber-work and decorative features in the original manner;
- Straightening and re-securing fences and gates;
- Minor servicing of equipment and services like air conditioning and fire services, components with moveable parts requiring lubrication like machinery, engines, water reticulation systems, but only where less than half the parts need replacing;
- Maintenance of operational equipment such as the light rail system, wharf and cranes;
- Maintenance of electrical, telephone, security, communications, plumbing, drainage, and fire fighting systems;
- Maintenance of any existing power or pipe lines or other public services located on the property where this involves no alteration of the fabric of the place;
- Maintenance of paved roads and footpaths, including replacement of damaged sections;
- Landscaping maintenance such as mowing, weeding, watering, pruning and fertilising necessary for the continued growth of existing plantings without major alterations to layout, contours, structures, plant species or other significant features; and
- Tree surgery by a qualified horticulturalist or tree surgeon necessary for the survival of vegetation.

#### **Standard Exemption No. 2, Repairs**

*1. Repair to an item which is of the type described in (a) or (b) below does not require approval under s57(1) of the Act:*

- a) the replacement of services such as cabling, plumbing, wiring and fire services that uses existing service routes, cavities or voids or replaces existing surface mounted services and does not involve damage to or the removal of significant fabric;*
- b) The repair (such as refixing or patching) or the replacement of missing, damaged or deteriorated fabric that is beyond maintenance, which matches the existing fabric in appearance, material and method of affixing and does not involve damage to or the removal of significant fabric.*

*Note 1: Repairs must be based on the principle of doing as little as possible and only as much as is necessary to retain and protect the element. Therefore replacement must only occur as a last resort where the major part of an element has decayed beyond further maintenance.*

*Note 2: Any new materials used for repair must not exacerbate the decay of existing fabric due to chemical incompatibility, obscure existing fabric or limit access to existing fabric for future maintenance.*

*Note 3: Repair must maximise protection and retention of fabric and include the conservation of existing detailing, such as vents, capping, chimneys, carving, decoration or glazing.*

This exemption shall be strictly limited to the copying of existing fabric. Repairs should be carefully specified and carried out by licensed tradespeople with experience in the conservation of heritage fabric. It is essential that the composition of the fabric elements, such as mortars, renders and timber species remain the same.

This exemption shall apply to the repair or replacement of missing or deteriorated components such as:

- Bricks, stonework and other masonry units;
- Sections of mortar or render;
- Wall sheeting, weatherboards and external timber elements;
- Sections of decorative detailing such as balusters and cast iron lace panels;
- Sheet iron, slates or other roofing components such as ventilators;
- Paving surfaces or components;
- Internal and external timber detailing and joinery;
- Machinery components;
- Gutters, downpipes and flashing;
- Landscape and garden elements such as kerbs and edges;
- Sections of render or plaster; and
- Sections of joinery such as architraves and skirtings.

These exemptions also allow for normal repair of services and fittings, where this does not involve demolition or damage to significant fabric, including:

- Electrical wiring, plumbing and air conditioning services; and
- Repair and upgrading of air conditioning, phone and computer cabling.

### **Standard Exemption No. 3, Painting**

*1. Painting does not require approval under s57(1) of the Act if the painting:*

- a) does not involve the disturbance or removal of earlier paint layers other than that which has failed by chalking, flaking, peeling or blistering;*

- b) *involves over-coating with an approved surface as an isolating layer to provide a means of protection for significant earlier layers or to provide a stable basis for repainting;*
  - c) *employs the same colour scheme and paint type as an earlier scheme if they are appropriate to the substrate and do not endanger the survival of earlier paint layers.*
2. *Painting which employs a different colour scheme and paint type from an earlier scheme does not require approval under s57(1) of the Act, provided that:*
- a) *the Director is satisfied that the proposed colour scheme, paint type, details of surface preparation and paint removal will not adversely affect the heritage significance of the item; and*
  - b) *the person proposing to undertake the painting has received a notice advising that the Director is satisfied.*
3. *A person proposing to undertake repainting of the kind described in paragraph 2 must write to the Director and describe the proposed colour scheme, paint type, details of the surface preparation and paint removal involved in the repainting. If the Director is satisfied that the proposed development meets the criteria set out in paragraph 2(a) the Director shall notify the applicant.*

*Note: Preference should be given to the re-establishment of historically significant paint schemes of the item that are appropriate to the significance of the building.*

This exemption is considered in the same way as maintenance, including when minor repairs are carried out and the surface is repainted to hide the repair.

This exemption shall not apply where the finishes on an item are rare, original or elaborate and contribute in an important manner to the significance of the element.

Given that neither the internal or external paint schemes of the majority of buildings on the site are considered to be rare or original, this exemption shall apply to all painted finishes with the exception of any panels identified as being of archaeological significance.

Given that there are likely to be many layers of paint on painted surfaces, both internally and externally, this exemption applies only to where repainting is undertaken without removing the earlier paint layers, enabling them to be investigated and recorded in the future.

#### **Standard Exemption No. 4, Excavation**

1. *Excavation or disturbance of land of the kind specified below does not require approval under s57(1) of the Act, provided that the Director is satisfied that the criteria in (a), (b), or (c) have been met and the person proposing to undertake the excavation or disturbance has received a notice advising that the Director is satisfied:*

- a) *where an archaeological assessment has been prepared in accordance with the guidelines published by the Heritage Office of NSW which indicates that there is little likelihood of there being any relics in the land or that any relics in the land are unlikely to have State or local heritage significance; or*
- b) *where the excavation or disturbance of land will have a minor impact on the archaeological resource; or*
- c) *where the excavation or disturbance of land involves only the removal of fill, which has been deposited on the land.*

*2. A person proposing to excavate or disturb land in the manner described in paragraph 1 must write to the Director and describe the proposed excavation or disturbance of land and set out why it satisfies the criteria set out in paragraph 1. If the Director is satisfied that the proposed development meets the criteria set out in paragraph (a), (b), or (c) the Director shall notify the applicant.*

*Note: Any excavation with the potential to affect Aboriginal objects should be referred to the Director-General of the National Parks and Wildlife Service.*

An Archaeological Zoning Plan has been recommended for the site, but has yet to be undertaken.

Any excavation for services and maintenance conducted under this exemption, shall first be checked and coordinated against the areas of likely archaeological sensitivity or areas eventually identified in the Archaeological Zoning Plan.

No excavation shall be undertaken in sensitive areas without prior approval from the NSW Heritage Council, or in the Newington Nature Reserve, from NPWS.

#### **Standard Exemption No. 5, Restoration**

*1. Restoration of an item by returning existing fabric to a known earlier location without the introduction of new material does not require approval under s57(1) of the Act.*

*2. The following restoration does not require approval under s57(1) of the Act, provided that the Director is satisfied that the criteria in (a) have been met and the person proposing to undertake the restoration has received a notice advising that the Director is satisfied:*

- a) *The restoration of an item without the introduction of new material (except for fixings) to reveal a known earlier configuration by removing accretions or reassembling existing components which does not adversely affect the heritage significance of the item.*

*A person proposing to undertake restoration of the kind described in paragraph 2 must write to the Director and set out why there is a need for restoration to be undertaken and the proposed material and method of restoration. If the Director is satisfied that the proposed*

*development meets the criteria set out in paragraph 2(a), the Director shall notify the applicant.*

This exemption is based on the strict definition of restoration contained in the Australia ICOMOS *Burra Charter*. In practice, restoration works are generally accompanied by some minor reconstruction, which would be covered by the repairs exemption.

This exemption covers work such as:

- Reinstating components such as doors, windows, decorative or special detailing and landscape features which have been removed from their original locations and which are in a suitable condition for re-use; and
- Removing infills from verandahs, enclosures to fireplaces and minor partitions.

**Standard Exemption No. 6, Development endorsed by the Heritage Council or Director**

*1. Development specifically identified as exempt development by a conservation policy or strategy within a conservation management plan which has been endorsed by the Heritage Council of NSW or within an interim conservation management strategy endorsed by the Director does not require approval under s57(1) of the Act.*

**Standard Exemption No. 7, Minor Activities with no Adverse Impact on Heritage Significance**

*1. Anything which in the opinion of the Director is of a minor nature and will not adversely affect the heritage significance of the item does not require approval under s57(1) of the Act.*

*2. A person proposing to do anything of the kind described in paragraph 1 must write to the Director and describe the proposed activity. If the Director is satisfied that the proposed activity meets the criteria set out in paragraph 1, the Director shall notify the applicant.*

**Standard Exemption No. 8, Non- Significant Fabric**

*1. The following development does not require approval under s57(1) of the Act, provided that the Director is satisfied that the criteria in (a) have been met and the person proposing to undertake the development has received a notice advising that the Director is satisfied:*

- a) The alteration of a building involving the construction or installation of new fabric or services or the removal of building fabric which will not adversely affect the heritage significance of the item.*

*2. A person proposing to do anything of the kind described in paragraph 1 must write to the Director and describe the proposed development. If the Director is satisfied that the proposed development meets the criteria set out in paragraph 1(a), the Director shall notify the applicant.*



### **Standard Exemption No. 9, Change of Use**

1. *The change of use of an item or its curtilage or the commencement of an additional or temporary use does not require approval under s57(1) of the Act, provided that the Director is satisfied that the criteria in (a) or (b) have been met and the person proposing to undertake the change of use has received a notice advising that the Director is satisfied:*

- a) The use does not involve the alteration of the fabric, layout or setting of the item or the carrying out of development other than that permitted by other standard or site specific exemptions; or*
- b) The use does not involve the cessation of the primary use for which the building was erected, a later significant use or the loss of significant associations within the item by current users;*

2. *A person proposing to change the use of an item or its curtilage or the commencement of an additional or temporary use of an item or its curtilage in the manner described in paragraph 1 must write to the Director and describe the changes proposed. If the Director is satisfied that the proposed development meets the criteria set out in paragraph 1(a) or (b), the Director shall notify the applicant.*

### **Standard Exemption No. 10, New Buildings**

1. *Subdivision under the “Strata Scheme (Freehold Development) Act” or “Strata Scheme (Leasehold Development) Act” of the interior of a building that has been constructed since the listing of the item on the State Heritage Register or the publication of an interim heritage order in the Gazette which applies to the land does not require approval under s57(1) of the Act.*

2. *Alteration to the interior of a building which has been constructed since the listing of the item on the State Heritage Register or the publication of an interim heritage order in the Gazette which applies to the land does not require approval under s57(1) of the Act.*

### **Standard Exemption No. 11, Temporary Structures**

1. *The erection of temporary structures does not require approval under s57(1) of the Act, provided that the Director is satisfied that the criteria in (a) and (b) have been met and the person proposing to erect the structure has received a notice advising that the Director is satisfied:*

- a) The structure will be erected within and used for a maximum period of 4 weeks after which it will be removed within a period of 2 days and not erected again within a period of 6 months; and*
- b) The structure is not located where it could damage or endanger significant fabric including landscape or archaeological features of its curtilage or obstruct significant views of and from heritage items.*

2. A person proposing to erect a structure of the kind described in paragraph 1 must write to the Director and set out the nature of the structure, the use for the structure and how long it will remain in place and the next occasion on which it is anticipated that the structure will be erected. If the Director is satisfied that the proposed development meets the criteria set out in paragraphs 1(a) and 1(b) the Director shall notify the applicant.

#### **Standard Exemption No. 7, Landscape Maintenance**

1. Landscape maintenance which is of the type described below does not require approval under s57(1) of the Act:

- a) weeding, watering, mowing, top dressing, pest control and fertilizing necessary for the continued health of plants, without damage or major alterations to layout, contours, plant species or other significant landscape features;
- b) pruning to control size, improve shape, flowering or fruiting and the removal of diseased, dead or dangerous material, not exceeding 20% of the crown of a tree within a period of 2 years; or
- c) tree surgery by a qualified horticulturist or tree surgeon necessary for the health of those plants.

*Note* In relation to cemeteries, landscape features include monuments, grave markers, grave surrounds, fencing, path edging and the like.

#### **Standard Exemption No. 13, Signage**

1. The erection of signage which is of the types described in (a) or (b) below does not require approval under s57(1) of the Act:

- a) temporary signage which is located behind or on the glass surface of a shop window which is not internally illuminated or flashing and is not to be removed within eight weeks; or
- b) a real estate sign indicating that the place is for auction, sale or letting and related particulars and which is removed within 10 days of the sale or letting of the place.

2. The erection of signage which is of the types described in (a) or (b) below does not require approval under s57(1) of the Act, provided that the Director is satisfied that the criteria in (a) and (b) have been met and the person proposing to erect the structure has received a notice advising that the Director is satisfied:

- a) the erection of non-illuminated signage for the sole purpose of providing information to assist in the interpretation of the heritage significance of the item and which will not adversely affect significant fabric including landscaping or archaeological features of its curtilage or obstruct significant views of and from heritage items; or

- b) *signage is in the form of a flag or banner associated with a building used for a purpose which requires such form of promotion such as a theatre or gallery, which is displayed for a maximum period of eight weeks and which will not adversely affect significant fabric including landscaping or archaeological features of its curtilage*
3. *A person proposing to erect signage of the kind described in paragraph 2 must write to the Director and describe the nature and purpose of the advertising or signage. If the Director is satisfied that the proposed development meets the criteria set out in paragraph 2(a) or (b), the Director shall notify the applicant.*
4. *Signage of the kind described in paragraphs 1 and 2 must:*
- a) *not conceal or involve the removal of signage which has an integral relationship with the significance of the item;*
  - b) *be located and be of a suitable size so as not to obscure or damage significant fabric of the item;*
  - c) *be able to be later removed without causing damage to the significant fabric of the item; and*
  - d) *reuse existing fixing points or insert fixing points or insert fixings within existing joints without damage to adjacent masonry.*

**Standard Exemption No. 14, Burial Sites and Cemeteries**

1. *Development on land within a burial site or cemetery which is of the type described in (a), (b) or (c) below does not require approval under 57(1) of the Act:*
- a) *the creation of a new grave;*
  - b) *the erection of monuments or grave markers in a place of consistent character, including materials, size and form, which will not be in conflict with the character of the place; or*
  - c) *an excavation or disturbance of land for the purpose of carrying out conservation or repair of monuments or grave markers;*

*provided that there will be no disturbance to human remains, to relics in the form of grave goods, associated landscape features or to a place of Aboriginal heritage significance.*

*A person proposing to carry out development in the manner described in paragraph 1(b) or (c) must write to the Director and describe the development proposed. If the director is satisfied that the proposed development meets the criteria set out in paragraph 1, the Director shall notify the applicant. This exemption does not apply to the erection of above-ground chambers, columbaria or vaults, or the designation of additional areas to be used as a burial place.*

This exemption is not applicable to the MPHP.

#### **Standard Exemption No. 15, Compliance with Minimum Standards and Orders**

1. *Development which is required for the purpose of compliance with the minimum standards set out in Part 3 of the Heritage Regulation 1999 or an order issued under either:*

- a) *Section 120 of the Heritage Act 1977 regarding minimum standards of maintenance or repair; or*
- b) *Section 121S of the Environmental Planning and Assessment Act 1979 regarding an order which is consistent with a submission by the Heritage Council under 121S (6) of the Act;*

*does not require approval under s57(1) of the Act.*

#### **Standard Exemption No. 16, Safety and Security**

1. *The following development does not require approval under s57(1) of the Act, provided that the Director is satisfied that the criteria in (a) and (b) have been met and the person proposing to undertake the development has received a notice advising that the Director is satisfied:*

- a) *the erection of temporary security fencing, scaffolding, hoardings or surveillance systems to prevent unauthorised access or secure public safety which will not adversely affect significant fabric of the item including landscape or archaeological features of its curtilage; or*
- b) *development, including emergency stabilisation, necessary to secure safety where a building or part of a building has been irreparably damaged or destabilised and poses a safety risk to its users or the public.*

2. *A person proposing to undertake development of the kind described in paragraph 1 must write to the Director and describe the development and, if it is of the kind set out on 1(b), provide certification from a structural engineer having experience with heritage items confirming the necessity for the development with regard to the criteria set out in 1(b) and any adverse impact on significant fabric. If the Director is satisfied that the proposed development meets the criteria set out in paragraph 1(a) or (b), the Director shall notify the applicant.*

#### **Standard Exemption No. 17, Movable Heritage Items**

1. *The temporary relocation of moveable heritage items, including contents, fixtures and objects, to ensure their security, maintenance and preservation, for conservation or exhibition, to ensure health or safety, the need for a controlled environment for those heritage items, or to protect the place, and which are to be returned to their present location within six months, does not require approval under s57(1) of the Act*

2. *A person proposing to relocate a moveable heritage item as set out in paragraph 1 must advise the Director in writing of the proposed location and the reasons for its relocation.. If the Director is satisfied that the proposed development meets the criteria set out in paragraph 1, the Director shall notify the applicant.*

### 22.9.1 Further Exemptions

Further additional exemptions requested as part of this project include exempt development as described under the *Environmental Planning and Assessment Act, 1979*. This includes exempt development identified under:

- Sydney Regional Environmental Plan No. 24 – Homebush Bay Area (Amendment No. 2) (SREP 24); and
- State Environmental Planning Policy No. 4 – Development without Consent (Amendment No. 15) (SEPP 4).

Exempt development is required to be consistent with an adopted Conservation Master Plan or Conservation Management Plan for the MPHP. As previously discussed the involvement of a heritage professional is required in any decision to apply a further exemption – where this may materially impact the significance of the heritage item – to determine if it is in accordance with an endorsed CMP.

Exempt development, as applicable, includes:

1. Minor building alterations and additions to and uses of items of environmental heritage provided that the development does not impact on the heritage significance of the building, structure or landscape.

The following table sets out a range of alterations and additions, which can be undertaken under this exemption. This list is not exhaustive but any other work considered under this exemption must be of similar scale, type and impact.

Building Type	Extent of Alterations and Additions
Small and medium sized timber framed administration support and operational buildings generally dating from the late interwar years until the end of the Second World War.	<ul style="list-style-type: none"> <li>• Installation of new external security doors to existing door openings.</li> <li>• Installation of surface mounted internal communications cabling or upgraded power supply and fittings.</li> <li>• Installation of new floor finishes such as carpet or vinyl over existing floor finishes.</li> <li>• Upgrading of internal light fittings and the installation of additional internal light fittings.</li> <li>• Installation of new internal furniture and fittings, where such installation does not require the removal of significant fittings.</li> <li>• Erection of external accessible ramps where required.</li> <li>• Infill or treatment of rail track to minimise trip hazards where the work is completely reversible.</li> <li>• Upgrading of, and connection to, services such as sewer and water.</li> <li>• Minor penetrations to accommodate ventilation and fire safety.</li> <li>• Installation of fire safety features such as hose reels, hydrants.</li> </ul>

Building Type	Extent of Alterations and Additions
<p>Large volume former explosives storehouses, dating from the interwar period until the end of the Second World War. Both brick and timber framed buildings are included in this category.</p>	<ul style="list-style-type: none"> <li>• Installation of new external security doors to existing door openings.</li> <li>• Installation of surface mounted internal communications cabling or upgraded power supply and fittings.</li> <li>• Installation of new floor finishes such as carpet or vinyl over existing floor finishes.</li> <li>• Upgrading of internal light fittings and the installation of additional internal light fittings.</li> <li>• Installation of new internal furniture and fittings, where such installation does not require the removal of significant fittings.</li> <li>• Installation of new internal partitions which do not require the removal of significant fabric.</li> <li>• Installation of new internal wall finishes which do not require the removal of significant fabric.</li> <li>• Erection of external accessible ramps where required.</li> <li>• Infill or treatment of rail track to minimise trip hazards where the work is completely reversible.</li> <li>• Upgrading of, and connection to, services such as sewer and water.</li> <li>• Minor penetrations to accommodate ventilation and fire safety.</li> <li>• Installation of fire safety features such as hose reels, hydrants.</li> </ul>
<p>Former residential buildings, including those currently used for office accommodation. Both brick and timber framed buildings are included in this category.</p>	<ul style="list-style-type: none"> <li>• Installation of new external security doors to existing door openings.</li> <li>• Installation of surface mounted internal communications cabling or upgraded power supply and fittings.</li> <li>• Installation of new floor finishes such as carpet or vinyl over existing floor finishes.</li> <li>• Upgrading of internal light fittings and the installation of additional internal light fittings.</li> <li>• Installation of new internal furniture and fittings, where such installation does not require the removal of significant fittings.</li> <li>• Installation of new internal wall finishes which do not require the removal of significant fabric.</li> <li>• Upgrading of kitchen and bathroom fittings, including the replacement of existing non significant fittings, fixtures and water repellent surfaces.</li> <li>• Erection of external accessible ramps where required.</li> <li>• Upgrading of, and connection to, services such as sewer and water.</li> <li>• Installation of fire safety features such as hose reels, hydrants.</li> </ul>

2. Minor maintenance, repairs, painting, excavation, and restoration works to items of environmental heritage;
3. Minor landscaping and installation of fittings in the public domain including paving, gardening, planting, bus shelters, park and street furniture, access ramps for people with disabilities, shade structures, awnings, playground and recreational equipment, fences and gates, flagpoles, cycle and pedestrian paths, cycle storage racks/areas, public art and the like;
4. Temporary uses, buildings and structures (being for a period of two months or less) associated with festivals, minor events, markets, carnivals, outdoor cinemas, interactive video screens, street performers, entertainment, information booths, merchandising, food and beverage outlets, trade shows, exhibitions, public meetings and the like;
5. Signage for the purposes of event promotions, and directional and identification signage;
6. Amenities, facilities and support infrastructure for existing public domain such as but not limited to utility installations, mobile telecommunication facilities, traffic management and maintenance road works, visitor information booths, walls, fences, kiosks, solar panels and solar panel structures, flagpoles, exterior lighting (including street lighting, lighting of trees, public art, building and landscape features, and themed lighting for events and festivals, but does not include installation of permanent outdoor lighting for stadia or outdoor venues), access ramps for people with disabilities, toilet facilities, bollards, outdoor cafes, drinking fountains/bubblers, public art;
7. Demolition of Exempt Development; and
8. Filming provided that it does not involve:
  - changes or additions that are not merely superficial and temporary;
  - mounting or fixing of any object or article on any heritage item;
  - the movement or parking of any vehicle or equipment on areas not designed for that use; or
  - any permanent changes to vegetation or other natural or physical features of the item.

These types of exempt development (Nos 1 – 8) can be undertaken without the need for:

- The preparation of additional conservation plans or reports and their approval by the NSW Heritage Council and the Minister for Infrastructure, Planning and Natural Resources;
- Further development consent being obtained from the Minister for Infrastructure, Planning and Natural Resources under the EP&A Act; and
- Further approval being obtained from the Heritage Council under the *Heritage Act, 1977* (section 60).

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# **Appendices**



## Appendix A

### Chronological History

Historian Wendy Thorpe compiled this chronological history of the former RAN Armament Depot for the SBP Heritage Assessment in 1996. The information contained in the history was gathered from Defence Department files and RANAD archives. It has been reproduced here in full and covers the entire site, prior to 1999 demolition of the southern areas.<sup>1</sup>

1788

First exploration of area of Homebush Bay.

1790

First detailed charting of Homebush Bay to Rosehill.

1797

Grants to Captain Henry Waterhouse and Liet. John Shortland and Archer in area of Holker Street. 25 acres each ((current portions 205 and 206). Fronting to the river.

1806

Small grant made on Parramatta Road to Samuel Haslam.

1807

Land grant to John Blaxland (c. 1390 acres), named “Newington”. Comprised all the land between Parramatta River and Parramatta Road and between Duck River and Haslams Creek. Earlier grants were excluded, as was a reservation for a road. Likely to have acquired the earlier grants shortly after his purchase (except Haslam). Generally low lying swamps bordering watercourses. Blaxland enclosed 40 hectares on rise overlooking the river and built a cottage.

1810

D’Arcy Wentworth gains Homebush Estate.

Governor Macquarie visits Newington.

1811

Establishment of salt works. Described in the Echo in 1890.

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<sup>1</sup> Wendy Thorp, 1996 Schwager Brooks and Partners, RAN Newington Armament Depot Heritage Assessment for Department of Defence.

1816-1817

Construction of tweed factory at Newington (described by daughter).

1819

Possible mill on site.

1827

By this year 8 tons of salt sent to Sydney each week.

1832

Current Newington House built.

1837

Well-established orchard and house.

1838

St Augustins built in grounds of Newington.

1840

First pits sunk by Blaxland looking for coal.

1841

Blaxland sinks trial pits to explore for coal. Positive results leads to Blaxland forming an association with the Australian Mining Company. More work but soon eased.

1843

John Blaxland mortgages Newington in the midst of server recession to Australian Trust Company for 2000 pounds.

1846

Blaxland dies.

1851

Trust Company sells the estate to recover mortgage to John Dobie.

1854

Newington Estate repurchased by the Blaxland Family from Dobie.

Subdivision of Blaxland Estate (south-eastern portion). Offered for sale as “Village of Newington”, 130 acres cultivated and 288 acres cleared for grazing. Also contained 40 acres used as a salt works; rest remained timbered. Largely unsuccessful. Important for defining the future boundaries of MPHP.

1855

Australian Timber Company formed to work timber on Newington Estate. Proposed to purchase 10 acres and had plant worth 17,500 pounds. Timber supply said to be inexhaustible.

1856

First allotment of the subdivision sold.

1859

Approximate: the estate offered as security against another large loan.

1860

Only two allotments of the subdivision sold at this time.

Estate transferred to the official Assignee of the insolvent Estate of Edward Blaxland. Sold to Charles Kent (merchant).

Bores again reveal thin seam of coal between Newington; not worked.

By this time the house and out buildings run down. The area between it and the river comprised the salt works, boiling down works and slaughterhouses.

1861

Slaughterhouse established by a Mr Dawson.

Kent transfers the property back to auctioneers. Blaxland advertises household effects for sale by auction.

1863

Newington House and some of the estate (10 hectares) were leased to the church. Church agrees to restore house in lieu of rent for five years. Newington College started. Small cottages said to be dotted about grounds.

1864

Auctioneers, William Dean and Co., mortgage property. At this time the boiling down works, salt works and slaughterhouses are still in operation.

1871

NSW government establishes, after removal of imperial troops, the Ordnance and Barrack department which has, under direction of a Warlike Stores Board, to provide and regulate the supplies and ammunition for war, for defence purposes; exclusive of the torpedo service specially managed by the Superintendent of the Telegraph Branch. The O and B Dept. by Act of Parliament has supervision and responsibility for all public magazines, for storage of explosives in the colony and it regulates licensing of private gunpowder magazines through New South Wales as well as granting licences to vendors of explosives and directing receipt and delivery out of metropolitan area by merchants, contractors etc.

1874

Newington House first offered as a site for an asylum – refused by the government.

1875

Report presented by the Gunpowder Storage Board, which recommended that the Newington site be developed as a magazine for merchants' explosives while Goat and Spectacle be upgraded.

1877

Property sold to John Weatherhill, draper.

Plan of the Newington Estate in this year described as "Plan of the Newington Estate Property of John Weatherhill" showing a proposal for complete subdivision.

1878

Second attempt to find coal over an area of 607 hectares – no success.

Entire estate subdivided as Newington and Rosebridge by Weatherill. First allotments sold in the year but generally unsuccessful. Rosebridge offered as a mining village. Only a few along Parramatta Road sold over the next twenty years.

1879

Newington House offered for sale (unsuccessful) and again offered as an asylum – government accepts and founds asylum for aged women.

1880

Newington College moved to present location; property resumed by Government.

Closure of salt works.

Area of 28 acres 2 r 16p acquired as site for powder magazine.

1881

Women inmates from Hyde Park Barracks moved to Newington, which was used as a Hospital for the Insane.

1882

Portions south of the river and to Jamieson Street resumed for Depot. Government Gazette 22 August 1822 “certain works for and in connection with the erection of a magazine for the storage of gunpowder and other explosives and certain buildings in connection therewith”. An area of 248 acres 1r 8p.

1883

Memo describes how land belonged to two people, John Sutherland and John Weatherill, who sent claims in for compensation, which had not been finalised at this date. Sutherland owned sections 99, 100, 101, 102, 109, 110, 111, 112, 120 that were valued at 4870 pounds. Weatherill owned lots 83, 84, 97, 98, 103 and 104, which were valued at 3440 pounds.

1884

Indentures and compensation for resumptions made in this year.

1889

Reclamation by PWD commenced in this year.

1890

Construction of stone sea wall commenced in this year.

1893

At Homebush Bay 2 miles of fascine banks have been formed and an area of 500 acres of mud flats is in process of reclamation.

1894

At Homebush Bay the fascine banks were raised. Homebush Bay reclamation works cost in 1893 5224-14-1.

1892

Municipality survey shows site for magazine – largely marshy.

1894-95

PWD Harbours and Rivers Report: Muddy Creek Canal: The work is being extended towards Bestic Street. The channel has been excavated to 4 feet below low water, the work having been done dry by diverting the creek water and pumping out the soakage. Fascine banks have been constructed on each side of the extension. 1782 rods of wire fencing have been erected on the boundaries of the government land and for the purpose of protecting the grassed slopes.

1895

Wharf at Newington repaired.

1895-96

PWD Harbours and Rivers: Muddy Creek: The extension of this branch to Bestic Street was completed in August 1895. The extension was 2000 feet; the dimension of the canal being 100 feet wide on top, 50 feet at the bottom and 10 feet deep.

1897

Plan of military wharf.

1897-98

PWD Harbours and Rivers Report: Muddy Creek: This reclamation was carried out by grab dredge. 68,915 cubic yards of materials having been spread to formation level. A new bridge was constructed across Bestic Street to replace one damaged by floodwater. The banks were repaired with fascines where necessary.

1989-99

Homebush Bay: During the last month of the year 24 men have been engaged facing up the embankments with stone.

1899

Portions east of Jamieson Street resumed.

1899-1900

Reclamation Homebush Bay: The work of facing the embankments with ballast was completed and the fascine work was repaired where found necessary. 10, 179 feet of hand packed rubble facing was put in and 1752 feet of fascine work was repaired. Expenditure 3974-10-2.

Newington Powder Magazine Cost of Land – 377-9-7.

1900

Portions east of Jamieson Street resumed for depot.

Construction on stone sea wall said to be finished in this year.

1900-1901

Homebush Bay - owing to scarcity of punts and difficulty in obtaining good material only a comparatively small amount of work has been done at Homebush Bay reclamation.

1901

Reclamation work said to be completed in this year.

1902-1903

Military works carried out for Federal Government – Newington

Repairs to Quarters 1-4-0; Repairs to Quarters 0-17-0; Repairs to Quarters 0-7-2; Repairs to Water Services 4-16-1; Repairs to Sergeants Quarters 5-6-8; Repairs to Quarters 1-3-0; Painting 41-15-6.

Powder Magazine Repairs 42-6-0

1903

Report of Committee of inquiry appointed to advise as to situation of present powder magazines and hulks and their liability to explode. Bantry Bay was considered to be the best option with the possible exception of Newington. The latter was ruled out because it was too close to densely occupied suburbs and this would increase as time went on; it was on a flat unscreened by hills; traffic to and from would have to pass through the busiest and narrowest part of the Harbour and Parramatta River; was too far from the Powder Ground at Rose Bay; the only part of the site that could be developed for a magazine was too far from the water and this would cause dangerous delays in transit of explosives. Part of the increased pressure was due to increased naval use of different types of armaments requiring different conditions. Spectacle Island too crowded at this time.

Report re: transfer of properties describes Newington as a comparatively new work completed in 1898 in four contracts amounting to 17,793 pounds. Includes warrant officers' quarters, four men's quarters, guard house, cells and lamp room, powder magazine, gun cotton store, laboratory, examining room, cooperage, latrines, jetty and approach, dwarf wall and iron fencing and gates, roads. All the buildings are of brick and the workmanship of the best quality. The powder magazine, laboratory and guncotton store are protected with brick retaining wall supporting earthworks mounds.

1905

SHT writes to commander of Military forces stating Department of Defence in occupation of wharf on piles fronting magazine without consent – asks for lease. SHT informed that question of ownership being examined and they could take no action until it was decided. SHT persisted – said that this wharf was excluded from Commonwealth property and demanded a lease. Commander of military forces stated: “this wharf was erected by the military works department of this state prior to date of transfer for exclusive use by the Military Department in connection with magazines at that place...”

1906

Committee appointed to advise NSW Premier re: situation of present powder magazines and their safety. Newington considered as a site for possible state magazine. Considered to be unsuitable due to its proximity to densely populated areas, its topography, access through heavily used routes, too far from the Powder Ground, ground for building too far from water access. Referred to as a military reserve.

Plan of all land surrounding the site in this year shown subdivided.

1907

Wentworth Estate resumed to accommodate State Abattoir.

Site plan of magazine shows gate, laboratory, magazine, railing and several houses, wharf and stone sea wall.

1908

Plan of Chicago Estate Auburn shows the area at the extreme southern end of the depot between Silverwater Road and Weatherill Street subdivided and up for sale (most streets shown on plan now in depot no longer exist).

1909

Railway built.

1910

Approximate: plan of riverside Heights Estate at Newington shows subdivision of all streets along western side of depot and indication of swampy lands.

NCO in charge of Newington requests erection of an “emergency magazine” for the storage of cordite cartridges on return after issue to Field Artillery.

1911



A Magazine building erected for the NSW Department of Works and Railways at a cost of 648-3-0 for use as a wood store.

1914

Remaining portion of Blaxland Estate resumed for State Brickworks.

25 August: Government resumes a portion of land including private property for use by Abattoirs.

The Meat Board considered it absolutely necessary that for efficiency of abattoirs they acquire all the northern area to use as resting paddocks for cattle. Noted that 226 acres automatically passed to Commonwealth when area resumed for powder magazine. Only about 16 ½ acres in use for storage of powder and balance leased by asylum. Proposed to increase magazine area by 30 acres, twice area of occupation to create approaches both land and water. Request balance to be vested in State for abattoir.

1915

Inspection of facility by Commander Coast Defences 2 Military District – questioned need for guard as there was “hardly any ammunition at Newington Magazine”.

Municipality survey shows asylum, magazine and abattoirs including the reservation to the north.

Abattoirs survey shows magazine and sites appropriated.

Lease to State for abattoirs of 182 acres for 21 years at 196-14-0 with option for renewal. Terms of lease are that it shall only be for agistment and no buildings of a permanent nature to be built without Commonwealth consent. The 21 years were required because the Board would need to spend a considerable sum on fencing, erecting sheds, making provision for water, draining and planting trees etc.

Survey of magazine.

1916

Land reclaimed to the north and east of the Magazine area vested in the SHT (now MSB) by proclamation of Government Gazette in 18 August 1916.

12 May: Government resumes back from SHT 130 acres of reclaimed land beyond former HWM fronting the Abattoirs.

18 August: SHT revested with 61 acres 1 rood p of former lands.

1918

Although little earlier expansion a need to maintain facility asserted in this year – regarding a memo re storage of explosives etc after war Senior Ordnance Officer of 2 military districts

stated that there was no explosives accommodation available at Newington or Goat Island but what will be required at the termination of the wars.

1920

Just prior to handover to Navy a small travelling crane erected on wharf.

Newington assessed by Navy Director of Ordnance Torpedoes and Mines as being suitable only for a proportion of the reserve ammunition which it is necessary to keep in Australia, viz “2 complete outfits for each ship on the station and 2 years practice ammunition”. He suggested Newington only be used as a temporary store as it was less than ideal. Was vulnerable, too close to city and too small. Concluded that they still needed to build a sufficient magazine.

In May 1920 Navy took control from Army of depot. Report at the time described the facilities being; wharf (100 yards from magazine with a small hand worked travelling crane of about 3 cwt capacity); double line of rails 2 foot gauge with four trucks (from wharf to the magazine where they spit to go into each compartment); magazine (three spans under one roof of three gables with a wall between each compartment and each compartment divided into bays by wooden uprights; dry gun cotton magazine (125 sq. feet of stowage, empty box store 225 ft. square and examining room 100 sq. feet) – magazine area encompassed an area of about 25 acres enclosed by an iron rail fence 8 feet high); lighting (oil lamps); water (4 inch main from Sydney Water supply); laboratory (in good condition); outside area to magazine belonging to Commonwealth totalled about 120 acres. This was surrounded by a wooden paling fence and also contained the caretaker’s quarters. Reports show the site to be under utilised.

Memo to Director of Naval Works: 17/9 “I am commanded by the Naval Board to inform you that it has been decided to take over the Newington Magazine from the military authorities but the actual transfer to the Navy Department will not take place until such time as advice is received from the Defence Department that the magazine has been cleared of military stores...”

Note from Secretary of Defence 15/7 re: military stores still at Newington – 400 barrels of gunpowder are in No 3 chamber of main magazine (no 1-2 empty); guncotton magazine contains a small quantity of gelignite and primers and receiving room was empty.

1921

Transfer from Army to naval control (22 July).

Some dispute over ownership of land: Commonwealth asserted that it had every right: transfer at federation f 268 acres.

1922

Work on new buildings at magazine likely to have been commenced in this year due to evidence of letter in 1924.

Minute paper: notes 4750 pounds put aside – to complete empty case store. Will be on block 999 and to be 38'6" and 9' high. Also a 2' gauge railway will be built from the wharf to the new building and extend line for the proposed smoke apparatus tower.

1923

Navy proposed to build several new buildings at magazine: a brick gunpowder magazine measuring 30x30 with a lobby 8x8; a brick, dry gun cotton magazine measuring 25x25 feet with a lobby of 8x8; a wet gun cotton magazine of similar dimensions; a brick warhead magazine 40x40 with tramlines to run through the centre of the building and the overhead traveller then in use on the warhead store at Spectacle Island to be installed; three smaller buildings of fibro cement or corrugated iron, one for shell painting 20x15 and two for shell scraping each 10x15. All the buildings were to be fenced in and traversed except the shell painting room.

Memo: Works and Railways: re proposal to erect timber and iron store building – contract has been let and due to be completed by 29 June (for fitted shell and depth charges).

1924

Letter from Premiers Department: "During the past two years this work (erection of buildings in connection with the magazine at Newington on Parramatta River) has been proceeding and all the materials..." being brought through hospital and asylum, as there are no other roads.

Correspondence: c.20 acres desired to make use of new works – wants some of the land leased to the Abattoir. Notes that proposed railway extension approximately defines the edge of solid ground – land to north and east of proposed railway was flat and low lying. Elevated ground was covered with dense scrub.

Acting Works Director states that plans for the new buildings prepared but couldn't commence work until decision made about ownership of land. Notes that the 1915 lease was 21 years and couldn't terminate for at least ten years but efforts were being made to break it in 1924. By March 1924 tentative agreement had been made with the Meat Board. By July 1924 workmen from the Board were on the process of removing the post and rail fence. Noted that the extension to Newington was required because of the dangerously congested state of Spectacle Island. By mid 1924 they had the 20 acres that they wanted.

Grant of 200 pounds requested to put roads in repair again (obviously magazine still oriented to river transport).

From this year examination of shells and explosives transferred to Newington from Spectacle Island. Correspondence refers to take-over of site from military and completed construction of shell store and approval and plans completed for warhead store, dry and wet gun cotton stores and powder, it is doubtful these buildings will be completed this financial year".

Plans: Central plan – Department of Works and Railways.

Sydney Harbour Trust reports that action being taken by Department of Works and Railways to carry out necessary repairs to wharf at Newington Magazine. Claimed that the headstock at

face of wharf decayed and part nearest western end affected by white ants; number of girders badly decayed.

Proposal to erect two huts for shell extracting machines – work considered unnecessary.

Acquisition of empty package store: approval given to take over a shed formerly used by Works and Railway at Newington for timber storage. Planned to have a timber floor land and used for storing empty packing cases, shell boxes etc. The Army erected the shed during the occupancy and the shed was large (60x58x36) and open at the sites and made of timber battens. About 300 yards from the nearest magazine.

Memo: Deputy Armament Officer: new order of shell filled shellite makes necessary to make provision for the protection of the employees. Present mess room No 1 Magazine enclosure and the shifting room in the cooperage. It was necessary for the mess rooms to be erected outside the magazine and present mess rooms and surrounding verandas to be converted to shifting rooms for TNT and shellite workers with hot and cold baths and showers.

Acting Director of Works says that work of building the stores, magazine and warhead etc will cost an additional 4000 pounds more than originally estimated because of the necessity of a large amount of fill required to raise magazines above swampy ground and the necessity of forming reinforced concrete raft foundations.

1925

Governor General states that a fully equipped naval ordnance depot affected by question of where future naval base in Australia would be – Sydney favoured but not enough to justify a new and expensive facility even if they could find a better site than at present. The GG outlined how the various stores were to be spread throughout facilities in the country. Newington was to have fixed ammunition (in the old military magazine) warheads (in new magazine under construction) gunpowder, wet and dry guncotton (in new magazine under construction), target smoke shell (old detonator magazine).

Correspondence: re improved system of hauling around site. Recommends provision of storage battery locomotive similar to that in use at Swan Island. The present system was unsatisfactory because a maximum load per day was 50 tons. The loco could carry 150 tons.

1925-1926

Works and Railways Estimate for works at Newington: new dining room; three shell examining rooms to be traversed; existing dining room and surrounding verandahs to be converted for shifting room; fire alarm system; in and out muster signal system; extension to wharf and provision of flying fox from shell store – mechanical traction of existing rails might be a suitable alternative.

Approval given for three shell examining rooms. Three traversed brick buildings 10 x15 on concrete with asphalt floors. One to be fitted with appliances for lifting and transporting 8” shell from the rail track to the building. Rail on loop opposite each with a shelter at entrance.

Erection of additional buildings, fencing, rail tracks, fire services completed by 7/9 at a cost of 10,678-5-4. These encompassed west guncotton store, gun powder magazine, dry guncotton store, and warhead store.

1926

New works included old mess building converted to a dressing shed (shifting room), hot water services salvaged from Spectacle Island installed, old smoke floor store became boxed shell store leaving only fixed ammunition in main magazine; three shell examining rooms are erected and a new mess room built between the official residences and the main magazine enclosure – this was preferred because it was near the main gate and outside the magazine area. The bomb store was to be located on a small island in the swamp with a proposed isolation magazine on the swamp in a position c. 400 yards from Group VI and the riverbank. Minister approves 600 pounds to repair retaining wall along the river.

Tenders called for conversion of mess room to dressing room (plans available on file).

Correspondence: re additional constable at Newington – claimed that one should reside there permanently especially in case fire breaks out. No accommodation available at present time either for married or single but suitable single quarters could be provided at small cost by slight alterations to the mess room in the course of construction.

1927

Plan of site from approximately this date.

By this date septic tanks installed at a cost of 400 pounds replacing the earlier pan system.

Mess room converted to dressing shed but noted that additional basins and hot water service for hot and cold showers required to meet regulations. Local firm built it on basis of tender.

Installation of extracting machines at No 1 Boxed shell store completed by 5/10 although mantlet bar not installed.

New mess room completed by 17/2 with verandahs enclosed for 525-7 pounds (actually completed late 1926).

Tender of Australian General Electric Co. Ltd for fire alarm system accepted.

1928

Plan of proposed bomb store (Commonwealth designed).

Present: Building 20 extended to augment accommodation for primer fitted ammunition and a police office and search room with sleeping accommodation for relieving constable had been erected at main entrance.

Approval given for installation of electric light but work not commenced.

Adoption of new rules for handling armaments based on UK system.

Additional bomb store the bombs required for Navy's first aircraft (blg 33).  
Plans: proposed bomb store Building 33 – Dept. of Works.

Discussion with Meat Board for additional land to that which they acquired back in 1924. Now they want Section 83 as a site for an Isolation Magazine. By September Meat Board had agreed to surrender Section 83, part of 84 and the whole of the low lying land to the north and east – rental to be adjusted on the basis that very little of the remaining land was sound – most was low lying and swampy.

By 1928 the following had been complete: boxed shell store with fixed ammunition in main magazine but old smoke float store became available so boxed shell transferred there; extracting machine installed; indenting machine installed; three examining rooms now available (former examining room to be used as return store); old mess room converted into shifting room and lavatories provided; mess room erected between official residence and main magazine enclosure.

Estimates for this year are for: erection of isolation magazine; rail tracks to connect isolation magazine and bomb store with existing tracks; extension of Group IV magazine to provide additional storage; provision of electric current at depot.

1929

Depot in this year included five residences, three magazines, four explosives storehouses, a main laboratory, three shell examining rooms, a shell marking room, shell scraping room, warhead examining room, shell indenting room, wharf with cranes, light rail system. Much expanded from its time of take-over from Army. No fixed lighting although electric light was about to be installed.

First travelling crane replaced by fixed hand crane.

Stable erected for police horses; mounted patrols now replace former foot patrols. Galvanised iron with concrete floor 14x12.5 feet. Had two stalls and feed boxes.

Plans: extension of filled shell and depth charge store Building 30 – Dept of Works and Railways.

Survey sheet.

Proposed extension to wharf did not proceed at this time.

1930

Works Director re erection of an isolation magazine 15x15. Owing to financial stringency the work has been deferred by Naval Board for consideration of conception with work estimates 1930/31. The proposal had been around since 1923.

Erection of shell store completed 15/2 at cost of 2037-11-4. Built by local firm on tender. Original store actually extended by 120". Plan on file.

1931

Application for easement for pipeline – mentions construction of stone sea wall.

1932

It was noted that in order to comply with regulations for Naval Armament Services there appeared to be no alternative but to transfer all explosives from Spectacle Island to some other suitable locations. Commenced to go to Newington but a prolonged process finally completed 1937.

Grants right to lay a pipeline 50' long as long as it does not approach closer than 200 yards to warhead store; suitable fencing to be erected on magazine side.

Installation of fire alarm system completed by 4.2 at a cost of 194-18-6 (actually an improvement on what was there).

1933

1929 crane modified.

1934

By this year the bomb store had been completed for 4056-11-7 (plan included on file).

1935

Transfer of small portion of land on fisher Street to Commonwealth by pensioner Mrs King. Specification: construction additional trolley lines, tunnels and repairs to transverse Gps XI and XIII explosives stores 28/11.

1936

Forty acres leased to Meat Board for grazing northern side of Blaxland Road for 21 years an extension of an earlier lease. Done so because at the present there was no foreseeable use for this land for the magazine.

1937

First reference to horses used for hauling ammunition at depot but may have been in use earlier.

2 x Plan of site in this year.

Removal of stores from Spectacle Island to Newington completed in this year.

Provision made in estimates to provide a detonator store in the following year and some modest expansion foreshadowed in 1939.

Works estimated to be required: build empty package store (400 pounds); access to magazine (100); swamp drainage (100), rebuild traverse around bomb store (775).

Specification: detonator store 28/10.

Specification erection of traverse to detonator store 26/10.

Specification: erection and completion of smoke float store 6/8.

Specification: erection and completion of concrete retaining walls and open drains 1/3.

Specification: reconditioning traverse to bomb store 2/2.

1938

Memo from Department of Defence: “The expansion program for the RAN provides for the erection of magazines and other facilities at Newington and due financial provision will be made in the estimates 1938/9. The area of land at the disposal of the Naval board is insufficient as a grouping of domestic buildings with explosives stores would not be in compliance with regulations and it will be necessary to prepare a new layout and rearrangement of buildings”. Desire that the Meat Board be informed that the ground will be reoccupied in six months from 6 June 1938 (but might not need blocks 84 and 85).

Plans: additions to group VI cartridge store No 2 Building 18 – Department of Interior.

Report: re testing for foundation for new building – considered a pile system necessary because of the weight of the magazine – proposal to connect buildings to wharf with a causeway and rail.

Memo: MSB – advises that the sea wall along the water frontage subject of previous correspondence was then being repaired but reports that the bank outside the depot boundary fence on the eastern side has collapsed and is allowing high tides to overflow the low lying areas.

Municipal Council of Auburn reports that the road to the magazine has been completed and requests payment for the work.

Traverse around bomb store was rebuilt – was too close.

Specification reconditioning traverse around bomb store 8/4.

1939



Memo: Department of Defence – will erect on the new land various magazines, shell stores, connected by trolley tracks – occupation to be not less than fifty years. The acquisition of the Meat Preserving Co. Works was to act as a buffer zone.

Between then and 1941 the proof yard buildings constructed comprising Building 17 with small buildings identified as a heat test room, colour test room, proof house, and day proof house. Linked to southeast lab area and storage facilities by two raised pathways through wetland.

Plans: extension of return store magazine Building 15 – Department of Works; plan of pyrotechnic store Building 34; plan of store and tube store Building 35; addition to warhead store Building 39; plan of new laboratory room and alterations to existing laboratory Building 146; plan of laboratory to adjoin shell examining room Building 154; new magazine and shell store buildings; plan of new proof house.

#### Site Plan

States 9000 pounds authorised in Unemployment Relief Scheme funds at Newington. Works undertaken generally include levelling main road in magazine area; soil to be used in reclaiming swampy areas; grade outer road between entrance gate and wharf.

Specification: erection of guard accommodation 23/10.

Specification: erection and completion of magazines, shell stores, laboratories and other buildings and works 22/9.

Specification: erection guards' quarters and guards' mess 31/8.

Specification: re-erection of empty package store 24/4.

Specification: erection and completion of buildings 20/2.

#### 1940

By this year a major building program was underway to accommodate removal of all explosives from Spectacle Island.

State Brick Works closed in this year.

The proof facility building (Building 17) constructed at the same time as the present Building 18 the latter in the wetland to the east of the original magazine.

Plans: Building 2; Building 3 – Department of Interior.

MSB writes to Navy requesting lease over an extension made to the wharf in this year – informed that the Navy did it.

Memo – notes that much work had been done under State Unemployed, Relief Scheme but these funds had been used by this date. Outstanding works were “completion new road from foreman’s quarters to wharf; extensions road to rail track near recent boxed shell store; erection of gantry and fit travelling block at rail track”.

Specification: erection and completion additions to framed building 19/12.

Specification: retaining walls and loop rail tracks 13/6.

Specification: erection of store 28/6.

Specification: erection and completion asbestos cement changing room 17/4.

Specification: erection brick heat test building (10) 5/8.

Specification: construction and extensions to wharf, pile foundations for cranes and repairs to existing wharf 20/2.

Specification: earthworks, rail lines and engineering services 2/10.

1941

Depot expanded by resumption of 38 hectares; this had been foreshadowed in 1939 and was accelerated by entry of USA into war in 1941 and fall of Singapore in same year. Several stores required in Sydney and Newington needed to be expanded. Record of acquisition by agreement of 95 acres from Meat Board.

Carnarvon Golf Course to the west of the newly acquired land for RAN storage was acquired for development as an ammunition store for the USA Navy. Also an area of about 200 acres to the south extending as far as Adderly Street was resumed to provide additional storage for both Imperial and Australian Navy. This extension (Auburn depot) was completed in 1944. By this year Building 18 completed and line of clean fill; proof yard (Building 17) constructed and fill from wharf to yard is evident; area between wharf and proof yards cleared of long growth and is probably former burning area 1; drains for wetland installed; Buildings 33 and 34 are constructed and an access way installed; drains created between Buildings 7 and 8 and the river; landfill has been commenced in an area of low land immediately adjacent to Haslams Creek and opposite 2KY station transmitter (mill based on aerials).

Plans: Building 18 – Department of Interior.

Specification: engineering services, light railways and earthworks 29/1.

Specification: erection and completion wood framed residence 10/10.

Specification: erection and completion of two timber framed buildings with rail track 10/10.

Specification: erection and completion of wood framed residence 16/5.

Specification: provision of protected barbed wire fencing 24/2.

Specification: supply, delivery and erection of 2 x 5 cwt travelling cranes and trolleys and lifting blocks 7/2.

1942

In later part of war construction commenced on the USN buildings in the bullring and adjacent areas between Holker and Jamieson Streets and the Burma Road. Still suffered lack of accommodation. USN facilities were laid out in two areas, the circle connected by a sunken rail (bullring) and the section to the north (the banana). Several smaller buildings including a detonator store 12 x 12 and three Quonset huts 12 x 12 and three Quonset huts 12 x 20 also constructed. The USN HQ was in York Street Grace Building and the Carnarvon Golf Club used as Unit accommodation.

State Brickworks site resumed in this year and brick kilns were used as expedient EO storage. One kiln was supposedly converted for use as a workshop. The 150' long brickyards wharf was served by 2 x 2.03 tonne electric cranes.

Drains adjacent to raised walkways are now constructed; fill appears to be modifying the landform at southern end of clean fill by Building 18.

Plans: ammunition storage magazine Buildings 56, 57, 76; proposed underground ammunition storage magazines Buildings 85, 86, 87, 88, 94, 95 – Department of Interior; proposed underground ammunition storage.

Complaints from Union: re bad, unhealthy and unsanitary working conditions and “mid-Victorian” period handling and transport system”.

Newington bought 135 acres for 5500 pounds from Meat Board and agreed grazing rights on it for meat board – the area east of Jamieson Street and between Fariola and Blaxland Streets.

Work of erecting gantry had commenced near magazine store.

1943

Plans: sketch of proposed additional accommodation and additions to main office block Building 6 and similar Buildings 14 and 15 – Department of Interior; sketch of extension of miscellaneous magazine store Building 24; new office for storehouse man section and storehouse man office section and joiners shop; underground ammunition storage details; double underground storage magazines Buildings 17 and 102; proposed additional accommodation two new laboratories Buildings 144 and 145; men’s amenity block.

Informal occupation of several surrounding blocks that were later formally resumed in 1946.

Specification: 26 overheads had operated travelling cranes 18/5.

Specification: erection and completion of 26 timber framed buildings and alterations and adds to one building and sundry other works 22/10.

1944

Auburn Depot extension complete in this year. Construction consisted of a number of storage buildings, two additional laboratory complexes and administrative buildings. To the east of new storage buildings a large area of lower lying land down to Haslams Creek became available for disposal activity.

Plans: cafeteria Building 4 and alterations to existing amenity building for men area 1 Building 5 – Allied Works Council; two laboratories stores, isolation magazine and lavatory block for office building, Buildings 40, 9 and lab B – Department of Interior; shifting rooms – Allied Works Council; cafeteria Building 105; fire protection services and fire booster pump house; amenity blocks Building 139 – Allied Works Council; amenity blocks Building 161; amenity block Auburn; proposed explosive receipt store.

Plan: asylum showing golf club house.

Specification for construction of roads and surfacing roads 10/8.

Specification: timber framed Building 20/7.

Specification: reinforced concrete road 9/5.

Specification: erection and completion timber framed Building 9/3.

Specification: fire service mains 4/2.

Specification: erection and completion of five small buildings, retaining walls etc 11/4.

Specification: design, manufacture, delivery, erection, testing on site of 4 overhead hand operated travelling cranes in Buildings 22/3.

Specification: erection and completion of additional brick and timber-framed Buildings 16/12.

1945

Police horses replaced by bicycles. Horses put out to grass at Newington.

Accelerated building program included expansion of laboratory facilities and works to this end costing 41,460 were in hand and not implemented at the end of the war.

By this year increased pressure on this and other facilities as more ships came to Pacific and increased stocks stored at depots. Need for great storage capacity and rapid turnover of stores.

Ammunition Wharf leased from MSB for 60 pounds/annum payable from 1949.

Plans: additional group of laboratory buildings.

Resumption of several blocks of land for military purposes including that of Sydney Meat Preserving Co. although this company permitted to continue to dispose of wastes in absorption trenches near Fariola Street. Others are in Carnarvon Street, Beaconsfield, Day and Albany Streets.

Specification: erection and completion timber framed store 27/7.

Specification: painting 47 Buildings 26/7.

Specification: completion of additions to foreman of stores 22/3.

Specification: erection timber framed WC residence 5 21/6.

Specification: construction of roads 28/3.

Letter: re need for kitchen: at that time Villawood was used to provide meals for all depots including Newington basically to avoid cost of constructing a kitchen at Newington which was generally in excess of permanent requirements of the depot. "The personnel at Newington were recently increased to a figure far beyond that originally contemplated and the Villawood kitchen is at present unable to meet the requirements.... There is considerable unrest amongst the employees at Newington because the present service cannot meet all requirements. Because of the large amount of overtime and weekend work and the isolated nature of the establishment there seems to be good justification fro the complaints of the men".

Memo: re staff numbers – in January 1945 there were 430 people in weekdays (115 of whom worked at weekends on Saturday and Sunday and 30 worked overtime during the week). By June 1945 the total figure was 678 and expected to rise to 818 in a few weeks. 120 now work overtime on weekdays and on weekends there are 335 on Saturday and 340 on Sunday (180 of these work nights on Saturday and 155 on Sunday). Superintendent stated that if more men could be encouraged to work on weekends and nights they would use them.

1946

Second parcel of land acquired to the southwest of pre-war depot (85 hectares) to permit construction of additional storehouses and laboratories, which were run as a sub-depot of Newington. An increase of about 144 hectares and included much of the 1914 abattoirs resumption.

Brickworks site vacated by Department of Defence.

Storage still a problem at the depot as more supplies came with a need to find space for them. The contents of this and other stores remained in excess of prescribed explosive limits.

Union and personal conflict at Newington over an industrial dispute where union members were encouraged to “go slow” and use irritation tactics. Reported on sabotage of electro mobile, intimidation of one member by another to join union, a fistfight between two employees and vandalism of several buildings (roof damage and broken windows).

Concern about getting an improved bus service to avoid a three-mile walk before and after work; notes they have long walks between buildings on site.

Concern that men passing security clearances between themselves.

Instruction that the number of cattle grazed at Newington to be reduced to a minimum but notes that as no mild deliveries made they could be flexible. At that time there were 3 horses (1 police, 1 depot and 1 stray), 6 cattle (mostly privately owned) and 20 head of sheep graze in an isolated and fenced area rented from the department by a local dairyman. In all, about 300 sheep, which are to be reduced to 200; they keep the grass down and reduce fire risk.

Compulsory acquisition of land including blocks on Egerton Street, Beaconsfield, Day etc (although all had been in use from 1943). Commonwealth also acquires several roads, from municipal council at this time being Alban, Beaconsfield, Little, Carnarvon, Hezlet, Jamieson, Edgerton, Fariola, Northcote, Derby and Day.

Specification: repairs and renovation of two cottages 14/5.

Specification: new roofing at magazine 5/8.

Specification: extension of water mains for fire fighting 19/6.

Specification: repairs to roof of Building 35 6/8.

Specification: two shell examination pits 9/8.

Decision not to provide a hot meal service at Newington but an alternative proposal for a light refreshment service that was financially self supporting OK'd. Basically extension of mess room (Plan on file).

1947

New rules adopted for handling armaments.

Large portion of land acquired from Inter-colonial Investment and Building Company. Between Carnarvon, Adderly, Bay, Albany Streets and beyond. In 1950 the solicitors claimed that from some years prior to this acquisition the company had been developing the land and building homes on it and selling them. At the time of the resumption a considerable portion had been sub-divided and there was certain filling to be done and road construction and curbing and guttering. Had been occupied since 1943.

Lease by Carnarvon Golf Club of asylum lands ends in this year: they had site of clubhouse, 18 greens and 27 tees.

Specification: three reinforced traverses, installation of three shell-scraping machines 24/45.

1949

20 hectares acquired.

4 naval dockyard police in residence at Newington – request more civilian guards.

By this year several smaller buildings were erected in the bullring and connected by track to the main storage road – possibly laboratory or workshops. An eighth was added between 1949 and 1952.

Burning ground and demolition area at Building 92 visible; seven structures are apparent on top of bullring; area of bare earth to south of Building 24; additional area of fill in southern area opposite 2KY.

Plans: building to house amenities lighter – Dept. of Navy.

Site of Carnarvon Golf Course resumed (although occupied since 1943)- notes that their lease had expired two years prior so resumption was from Minister for Public Works (50 acres, 1 r 34 p). Compensation later paid to PWD verifying lack of golf club claim.

Specification: dredging at wharf 24/5.

Specification: steel and timber framed apparatus defusing building at ammunition magazine 18/3.

1950

Plan of site (Mill).

Demolition of wartime stocks under way.

During this decade iron railing surrounding earlier magazine area removed and disposed of. Early part of this decade the Rankine furnace installed (converted from diesel to gas fired prior to 1987).

Mrs Kings land (ceded in 1935) bought from Commissioner by her son for 180 pounds.

1951

Notes that expansion of depot allows movement of armaments and sale of a strip.

Formal compensation paid for resumptions of 1946 to several owners.

1952

6 hectares acquired for defence purposes. Cost 5500 pounds to acquire.

By this time extensive demolition of wartime stocks underway.

Area of bare earth south of Building 24 seen in 1940s now no longer bare; wetland are free of mangroves except along a few drains and appear to be relatively dry; an eighth structure appeared in bullring; new fill placed to extend line of fill in area of Building 18.

Compensation for several blocks resumed in 1946 including those in Fariola Street.

1953

Compensation paid to several owners for several resumptions made in 1946. Includes 27, 394-14-1 to PWD for golf course site. This encompassed the land between Day and Jamieson Streets, Fariola and Holker Streets.

1954

Easements granted to Sydney Meat Preserving Company after dispute over ownership of this land. Navy purchased land for 8000 pounds and Meat Co. granted the easement and permitted to pump effluent (emulsified fats in suspension) not to exceed 3000 gallons per day from works onto the area. Acquisition of reclaimed wetland adjacent to the proofing area. Also paid compensation to Auburn Municipal Council for the roads that had been resumed.

1956

Horse acquired to pick up garbage in depot.

Easement for Electricity Transmission lines north of and parallel with Weatherill Street between Beaconsfield and Carnarvon Streets.

General survey.

1957

Plans: alterations to residence 4 Building 126 – Department of Works.

1958

Between this year and 1970 at some time all the buildings in the bullring were removed.

1960

Decision to close Newington State Hospital; subsequently taken over by Prisons Department. 25 October: exchange of lands with MSB completed; the MSB wanted the land to develop existing tidal swamp at junction of Homebush Bay and Parramatta River as an industrial area.

Defence wanted the exchange to keep a proper distance for the magazine.



1961

Redundant crane at Garden Island to be used at Newington.

1962

5-ton travelling diesel crane erected at western end of wharf.

1963

Horse used only for garbage dray; sent to auction in this year.

Plans: standard flammable liquid stores – Department of Works.

1964

Plans: replacement of water mains and provision of new extensions; new water mains Stage 11.

1967

Plans: Building 33; proposed building for marrying torpedoes and warheads – MPHP Works Section; test firing range plans and elevations Building 75 – Department of Works; proposed location for unloading torpedoes – work study.

1968

3.6 metre wide easement for electricity cables from Derby Street to Abattoir east of Haslams Creek.

Plans: Trust store offices and amenities building – Building 75 – Department of Works; proposed location for unloading torpedoes – work-study.

1968

3.6 metre wide easement for electricity cables from Derby Street to Abattoir east of Haslams Creek.

Plans: Trust store offices and amenities building – Building 201; trust store chain fencing – Department of Defence.

1969

Navel Board suggestion that use of burning ground be discontinued and these activities transferred to Kingswood but a case made for retaining the facility.

Plans: road from Building 38 to Burma Road – details; security chain wire fencing.

1970

Lease on west side of 2KY transmitter to Haslams Creek granted to Industrial Gases to lay pipeline.

Easement 3.5 metres wide for water main from Derby Street to Commissioner Boundary near 2KY transmitter.

Plans: proposed laboratory room part of torpedo facility – RAN Supply Division; site plan for torpedo facility; swamp area survey; relocation of road between Buildings 39 and 45.

1971

Tear gas and other pollution from burning ground carried to a nearby industrial complex creating greater urgency in relocating this aspect of work.

Plans: extension to existing workshop to provide auto repair workshop; site plan; road widening alternative; drainage investigations and land filling operations.

Plan from assets register.

1972

Part of southern area of depot surrendered to the state for road works.

Rankin furnace and SAA destructor moved from the burning ground to the present location in the proof yard area.

Plans: torpedo assembly facility; proposed new brick laboratory building; filling of area No. 2; No3; 3-ton pedestal crane.

New building numbering system commenced.

1974

Cranes 30 and 33 replaced by 3 tone stationary level luffing electric wharf jib cranes.

Plans: detail survey – Aust survey office.

1975

c. Much tree planting undertaken.

1976

Lease given to Macquarie University to install mast to record wind velocity in Parramatta Valley.

Plans: levels and soundings opposite wharf – Aust. Survey Office.

1977

Old southern burning ground near Haslams Creek continued in use until this year when it was relocated to a new site in a fenced compound to the east of Building 132.

Plans: site – Department of Defence.

1979

Easement for Sydney Electricity transmission lines along Commonwealth Boundary near 2SM transmitter and Bennelong Road and on to Parramatta River.

Easement for electricity transmission lines parallel with western freeway 20.45 metres wide (sale of land for western freeway included in cost of \$839,000).

1980

Plans: existing layout magazine shop and garage.

Plan: site layout and numbers.

1981

Stores complex at Silverwater transferred from DHC to construction (2June) for \$1 million.

1982

Plan: eastern boundary fence.

1984

Plans: Building 56 waterproofing sketch – Department of Housing and Construction; detail survey.

1985

From mid 1980s increased awareness of historical importance of site; several reports and studies undertaken. Listing of several elements.

1987

Acceptance of NATO Safety Rules.

Plan: site layout and numbers.

1989

Notification by AHC to place Newington on Register of National Estate.

1990

Rankine furnace replaced by a new machine.

1994

March announcement made that the depot would close.