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# Fort Scratchley Historic Site Heritage Management Plan



**Australian Government  
Department of Finance and Deregulation**

Fort Scratchley Newcastle, NSW  
Cnr Nobbys Road and Fort Drive  
Newcastle East

27 May 2008

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**SUTERS Architects**

**In association with**

**DAWBIN Architects**

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## **PART 1: INTRODUCTION**

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### **1.1 OVERVIEW**

This Heritage Management Plan seeks to provide the basis for decision-making regarding the heritage conservation and ongoing management of Fort Scratchley including a review of options for future use of the site, including buildings and other structures on the site specifically, and the site generally. This study incorporates much of the content of the 1992/96 Conservation Management Plan prepared by Godden Mackay. A new historical background is provided together with a detailed comparative analysis, essential elements in the reassessment of heritage significance of this important site. Description of fabric and conservation policies are updated to take account of the current conservation works. Policies for appropriate use of individual elements are proposed, in order to provide a framework for future heritage management and conservation by the new custodians.

The nature and relative gradings of significance applicable to the site and buildings and its component parts were assessed using established Commonwealth Assessment Criteria, taking into account historical documentary material, oral histories and physical examination of the building fabric. Policies for appropriate adaptive reuse, conservation strategies and ongoing maintenance are proposed. These relate to the use of all parts of the complex and take account of the condition of the fabric and the anticipated need to satisfy occupational health and safety standards, BCA compliance and public access to the site.

Recommendations regarding implementation strategies have been prepared and compatible options for redevelopment and future use are examined, consistent with minimising impacts on the significance of the site and component parts.

This study was prepared in parallel with the final stages of the most comprehensive conservation and upgrading program undertaken at the site. The document is a prerequisite for the transfer of the property from Commonwealth ownership to the Newcastle City Council and will provide a policy framework for future management of the site, its ongoing maintenance and conservation.

### **1.2 CURTILAGE FOR THIS HMP**

The immediate curtilage is the boundary of the site itself, the perimeter of which is defined by Fort Drive and Nobbys Road, Newcastle East.

The greater curtilage includes areas with potential to affect views of the Fort and its presence in the landscape. Vistas to and from the Foreshore Park, Nobbys, over the Hunter River, the immediate cityscape of Newcastle, and the view on approach from Parnell Place contribute to the greater curtilage.

The curtilage of the Fort Scratchley Historic Site includes all areas within the boundary of the broader Coal River Precinct.

Fort Scratchley Historic Site , Newcastle  
– Heritage Management Plan

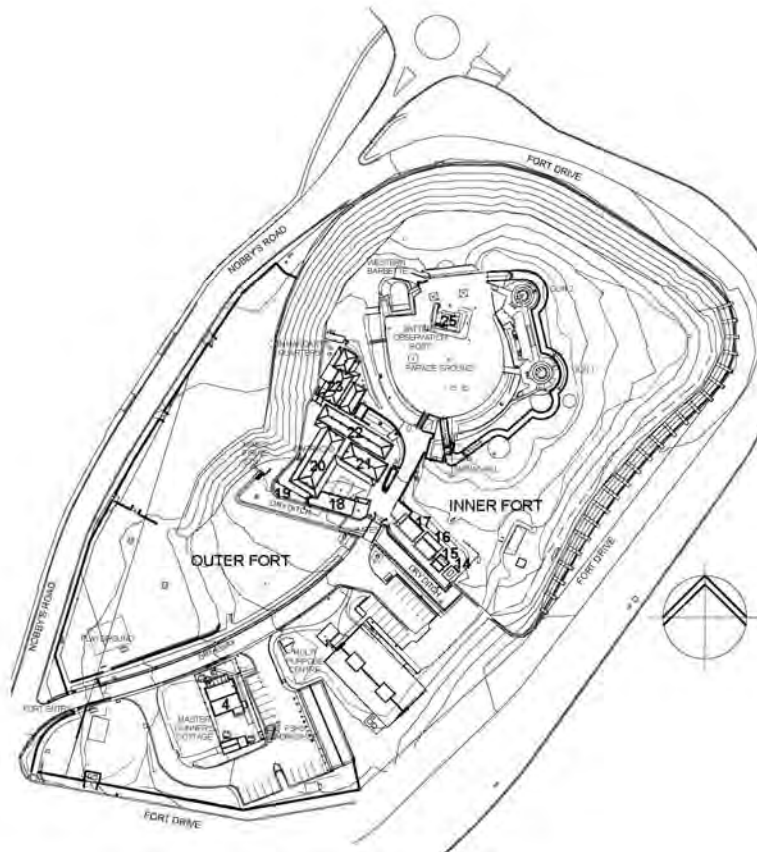


Figure 1.1 The Fort Scratchley site, the immediate curtilage, bounded by Fort Drive and Nobbys Road, Newcastle East.



### 1.3 STUDY Team

The study team comprises:

Mark Fenwick of Suters Architects

Bruce Dawbin of Dawbin Architects Pty Ltd  
Architects and Heritage Consultants

Laila Ellmoos, Historian, of Government Architects Branch of Department of  
Commerce

Rod Caldwell, preparation of Historical Comparative Analysis

Godden Mackay, authors of *Fort Scratchley – Conservation Plan August 1992, Reprinted 1996* have provided the basis for sections of the text in relation to Part 4 - Physical Evidence, Part 8 - Managing Significance, and Part 9 - Conservation Policy.

### 1.4 ACKNOWLEDGEMENTS

Grateful acknowledgement is made to the following who have assisted in the preparation of this study:

Carl Christie, former Commanding Officer at Fort Scratchley

Bill Hopkins, current President of the Fort Scratchley Historical Society

Acknowledgement is also made of the contribution of Lauren Gray during the review process of this report.

Finally, we acknowledge the contribution of the late Lt Colonel R S Mort for his extensive research on the history of the Fort and his numerous publications on this subject.

### 1.5 CLIENT AND STAKEHOLDERS

The client is Lauren Gray of the Department of Finance and Deregulation.

Other key stakeholders include:

Newcastle City Council, represented by Grant Halvorsen.  
Council's Heritage Officer is Sarah Cameron.

Fort Scratchley Historical Society, represented by president, Bill Hopkins and curator Graham Hall.

## 1.6 DEFINITIONS

This Heritage Management Plan utilises definitions from the *Australia ICOMOS Charter for the Conservation of Places of Cultural Significance* (the Burra Charter).

“**Plan**” in the context of this report refers to the ***Heritage management plan (HMP)***

“**Should**” in the context of this report implies a strong requirement for compliance.

“**May**” implies suggested or optional compliance.

**Part 9: Conservation Policies** outlines conservation and heritage management policies and implies a **mandatory** requirement for compliance.

**Optional guidelines** are also outlined for the implementation of the conservation and heritage management policies in terms of individual elements and structures within the Fort.

### Conservation Terminology

Conservation terminology including terms such as ‘**place**’, ‘**conservation**’, ‘**restoration**’, ‘**reconstruction**’, ‘**adaptation**’ etc follow the definitions of the Burra Charter:

**Fabric** means all the physical material of the place.

**Conservation** means all the processes of looking after a place so as to retain its cultural significance. It includes maintenance and may according to circumstance include preservation, restoration, reconstruction and adaptation and will be commonly a combination of more than one of these.

**Maintenance** means the continuous protective care of the fabric, contents and setting of a place, and is to be distinguished from repair. Repair involves restoration or reconstruction and it should be treated accordingly.

**Preservation** means maintaining the fabric of a place in its existing state and retarding deterioration.

**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 a place as nearly as possible to a known earlier state and is distinguished by the introduction of materials (new or old) into the fabric.

**Adaptation** means modifying a place to suit proposed compatible uses.

**Compatible use** means a use which involves no change to the culturally significant fabric, changes which are substantially reversible, or changes which require a minimal impact.

**Setting** means the area around the place which may include the visual catchment.

The term **curtilage** is frequently used to further define the setting literally as an ‘enclosed space’ but in the context of this study refers to a designated area around an item that is required to protect the significance of the item.



## 1.7 NUMBERING OF BUILDINGS

Three unrelated numbering systems have been used to identify structures at Fort Scratchley in recent years:

### **Defence Asset Identification**

The Department of Defence assigned each building an asset number, #1 to # 25, which was in use during the latter years of Army occupation. Buildings #1 to #13 included the outer Fort precinct, and all buildings in this area were demolished with the exception of #4 the Master Gunners cottage, and the Transport garage.

### **Contractor's Code**

During the recent refurbishment phase, each building, structure and internal space was assigned a contractor's code number to facilitate the works program.

### **Self guided tours**

The interpretation strategy undertaken in conjunction with this HMP has identified each element on the site for self guided tours with a separate numbering system.

This study has adopted the contractor's code system in the description of individual elements with references also to the Defence Asset numbering system.

***(Refer to Suters Drawings for refurbishment program, Appendix 3)***

## 1.8 RELATED STUDIES

This report should be read in conjunction with the following studies which form a complementary account of strategies to guide future management of the site under the new custodianship of Newcastle City Council.

These documents include:

Newcastle City Council –	<b><i>Draft Plan of Management 2008</i></b>
ICS –	<b><i>Heritage Interpretation Work Plan 2008</i></b>
ICS –	<b><i>FSSHS Exhibition Strategy for Moveable Heritage 2008</i></b>
ICS -	<b><i>Collections Management Policy for Fort Scratchley</i></b>
	<b><i>Historical Society Collections 2008</i></b>
Cynthia Hunter -	<b><i>Coal River Tourism Project 2001</i></b>
Pizzey Strategic for NCC –	<b><i>Coal River Precinct –</i></b>
	<b><i>Conservation and Cultural Tourism Management Plan</i></b>

## **PART 2: EXECUTIVE SUMMARY**

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This Heritage Management Plan has investigated the Fort Scratchley site through detailed historical analysis of physical fabric and assessment of cultural significance. The complex has been assessed as having outstanding levels of heritage significance under the Burra Charter themes of historical, aesthetic, social and technological/scientific significance.

On the basis of comparative analysis carried out for this study, Fort Scratchley is a rare example of a small scale association of fortifications in relation to comparable sites. The site demonstrates most of the significant Nineteenth Century defence features in the one location. The layout of the complex is typical of military planning during Australia's colonial era, reflecting the influence of English and colonial military design by the Royal Engineers in Australia.

The site is one of only two coastal batteries in Australia constructed on a large scale with completely closed works. Fort Scratchley and Bare Island were the only closed fortresses constructed during C19th period of development of the NSW Coastal Defence system.

Fort Scratchley was one the most important strategic coastal defence sites in NSW and is therefore recommended for listing on the National Heritage List.

Future heritage management of the site should be carried out in accordance with the recommendations of this Plan.

The primary objective of this study as briefed was to establish the significance of the Fort Scratchley site and its component parts as a basis for determining heritage management strategies and appropriate recommendations for future use options.

This Plan provides the policies and guidelines for conservation and future heritage management of the site, conditional on the transfer of ownership from the Commonwealth to the Newcastle City Council.

This Plan generally concludes that:

- Fort Scratchley is a site with an outstanding level of cultural significance. It is currently listed on the Register of the National Estate, the Commonwealth Heritage List, the State Heritage Inventory, and the Newcastle Local Environmental Plan 2003.
- Following transfer of Fort Scratchley to Newcastle City Council, the site will no longer constitute Commonwealth land. This will result in the removal of the listing from the Commonwealth Heritage List and will give legal effect to the listings in the NSW Heritage Register and the Newcastle Local Environment Plan.
- The current program of conservation and preservation of buildings and structures at the site due for completion in May 2008 is compatible with the conservation objectives of this Plan.
- Future and long-term use of the complex, including potential disposal of non-significant elements, should be conditional on adoption of the policies outlined in this Plan. Future use of the site should retain and enhance the heritage significance of the place.
- Future management strategies, acquisition of exhibits, interpretation, displays, conservation and maintenance works should be based on this Heritage Management

Plan. Any proposals to carry out works not covered by this Plan or the standard exemptions outlined in this Plan are to be guided by consultation with suitably qualified and experienced professionals and appropriately qualified tradespeople.

- This Plan outlines priorities for short-term and long-term maintenance programs to prevent deterioration of fabric and protect the site from vandalism and exposure to the elements.
- The former military functions of Fort Scratchley and its component parts should be explained through the ongoing care and conservation of significant fabric and suitable interpretive measures, in accordance with the Interpretation Strategy, being prepared in parallel with this study.
- Future interpretive displays and collections within the areas accessible to the public should be related to the history and development of Fort Scratchley, Newcastle's military heritage, and military associations of former serving personnel in the local community. Refer to the separate documents being prepared in conjunction with this Heritage Management Plan, detailing the Collections Strategy and the Interpretation Strategy for the Fort Scratchley Historic Site.
- Commercial opportunities should be exploited under strict conditions outlined in this Plan, to ensure adequate self funding for future maintenance and repair works.
- Future development and adaptive reuse of buildings will be strictly controlled. This Plan prohibits new development within the Inner Fort Precinct with limited internal alteration to existing structures, and allows for new development and alterations to structures within the Outer Fort Precinct in specified zones described by the Plan, under strict conditions.

## **PART 3: INVESTIGATE SIGNIFICANCE**

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### **3.1 HISTORICAL OVERVIEW**

#### **Terminology**

The study area is Fort Scratchley at Newcastle, which is located at the tip of the southern peninsula at the entrance to Port Hunter and the Hunter River. Nobbys Head (formerly Nobbys Island) lies further to the north, connected to the mainland by a man-made breakwater.

For the local Awabakal Aboriginal people, land in the vicinity of the study area was known as Tahlbinh. In the post-contact period, the study area acquired a number of different names, all of which reflected the use of the site by the new European arrivals. From the time the entrance to the Hunter River was discovered by Shortland in 1797 until the completion of the fortifications on the site in the late 1880s, the southern peninsula at the entrance to Port Hunter was named Braithwaite Head, Collier's Point, Beacon Hill, Coal Head, Fort Fiddlesticks, Signal Hill, Flagstaff Hill, South Head, Fortification Hill, and Allen's (or Allan's) Hill. The study area only acquired its current name, Fort Scratchley, when fortifications were completed in the late 1880s.

For the purpose of this report, the study area will be referred to as Signal Hill when discussing the site in the period from 1797 to the 1880s, and as Fort Scratchley in the period from the late 1880s to the present time.

#### **Historical Overview of the Fort Scratchley site**

##### **Early settlement at Newcastle: Coal Harbour and Colliers Point**

On 9 September 1797, some nine years after landfall at Sydney Cove, Lieutenant John Shortland located the entrance to the Hunter River at present-day Newcastle. Shortland was returning to Sydney following an unsuccessful pursuit of escapee convicts along the north coast of NSW. First Fleet diarist David Collins records that 'In this harbour was found a very considerable quantity of coal of a very good sort, and lying so near the water side as to be conveniently shipped; which gave it, in this particular, manifest advantage over that discovered to the southward (of Sydney)'. Shortland made a chart of the harbour and took samples of coal, which were sent to Sir Joseph Banks in England.<sup>1</sup>

The first attempt to establish a European settlement at present-day Newcastle took place on 10 June 1801, when Governor King sent a contingent of convicts there under the command of naval officer James Grant. The settlement was established to take advantage of the abundant surface coal deposits that had been noted four years previously.

The new settlers saw the place in terms of the potential economic returns they could reap from its abundant natural resources: the rich seams of coal that lay just below the surface, the stands of tall cedar trees which extended inland and the plentiful beds of oysters for lime burning. This perception of the settlement as an infinite resource was reflected in the earliest European name given to Newcastle, that was Coal Harbour. The Hunter River was sometimes referred to as the Coal River in the Nineteenth century.

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<sup>1</sup> David Collins, *An Account of the English Colony in NSW*, Facsimile of: London: T. Cadell jun. and W. Davies, 1798, 1971, Vol 2, p 48.

The site of Fort Scratchley was initially referred to as Collier's Point, as described in various accounts of the nascent settlement. On 15 June 1801, William Paterson recorded that after rounding Pirates Point (today's Stockton), that he had 'landed and examined the point of land where the coals are, and likewise the sea coast to the southward. ...The Point of land where I put the colliers to work I have called Collier's Point.'<sup>2</sup> Similarly, in a letter to Charles Greville in 1801, Francis Barrallier stated that 'Coal is found on the South Side of the mainland called Collier's Point'.<sup>3</sup>

Convicts and soldiers were recalled from Coal Harbour in early 1802, but on 15 March 1804, a second attempt was made to establish a permanent settlement at the site, in direct response to the Vinegar Hill uprising the month before. The settlement was named King's Town but was renamed Newcastle after the northern English port and coal mining town, in September the same year.

The settlement at Newcastle was a site of secondary punishment for re-offending convicts. The refractory workforce was set to work on timber-getting, lime burning and at the mines around the harbour. The mine at Signal Hill was in operation until 1817 when a second mine shaft was sunk at the site of the hospital on Watt Street.<sup>4</sup>

### Signal Hill

Lieutenant Charles Menzies was appointed to command and superintend the settlement at Coal Harbour from March 1804. Menzies recognised the need for defences at Newcastle when he noted that 'a few guns could be placed to great advantage on a commanding height above the Town as to prevent any vessel, in case of being seized by Convicts while up Paterson's River, from getting out of the Harbour'. It was envisaged that these defences would prevent convicts escaping from the penal settlement, rather than defending the town from an external threat. Salt boiling works were also set up on the 'southern slope leading to Signal Hill on the ocean side' under the command of Menzies.<sup>5</sup>

Lieutenant Thomas Skottowe, Commander of Newcastle from 1811 to 1814, 'erected a coal beacon and a new flagstaff to aid ships attempting to find the port' on Signal Hill in 1813. This structure was recorded in 1819 as 'a small stone tower with Lighthouse'.<sup>6</sup>

In 1818, work began to connect Nobbys Island to the mainland through the construction of a causeway; it was to be known as Macquarie Pier, in honour of the Governor. Stone for this major engineering work was quarried from Signal Hill.<sup>7</sup>

In 1822, Newcastle was abandoned as a site of secondary punishment and opened up to free settlers; the penal establishment was relocated to Port Macquarie. In this same year, Lieutenant Edward Close, an officer of the 48th Regiment and the Acting Engineer based

<sup>2</sup> William Patterson, 15 June 1801, HRA, Series 1, Volume 3, p 175; Letter from James Grant to Governor King, 24 June 1801, reporting on the Hunter River, ML C 230: <http://libapp.sl.nsw.gov.au/cgi-bin/spyodus/FULL/PM/BSEARCH/561/442864,5>

<sup>3</sup> Banks papers, Brabourne Collection, Vol 4 pp 78e-83 – ML CY 3008/103-113, cited in Graham Wilson and Martin Davies, Fort Scratchley Report: 2. Historical Report, unpublished report for J. Birmingham, archaeological consultant to the Department of Construction, Canberra, c1983, p 2.

<sup>4</sup> Huntington, History of Newcastle and Northern Districts 1897, p 74 cited in Graham Wilson and Martin Davies, *ibid.*, c1983, p 4.

<sup>5</sup> HRA Series 1 Volume 5 pp 367-8; also ADB entry for Charles Menzies: <http://www.adb.online.anu.edu.au/biogs/A020190b.htm>; Graham Wilson and Martin Davies, *op. cit.*, pp 3-4.

<sup>6</sup> Bingle, Past & Present Records of Newcastle 1873, p 5 and Huntington, History of Newcastle and Northern Districts 1897, p 101; Historical Records of Australia 1 Vol 9 pp 697-8; see also Thomas Skottowe, The Skottowe Manuscript: Thomas Skottowe's select specimens from nature of the birds, animals, &c. &c. of New South Wales, collected and arranged by Thomas Skottowe, Esq., Newcastle, New South Wales, 1813. (ed). Tim Bonyhady. Sydney: David Ell Press & Hordern House, 1988

<sup>7</sup> See diary of Lachlan Macquarie, Tuesday 4 August 1818: <http://www.lib.mq.edu.au/digital/lema/1818/1818aug.html>

at Newcastle in 1821-22, oversaw construction of a number of structures on Signal Hill, including a pagoda-style structure (described as a 'neat looking pagoda-house for the signal man and stoker's residence') and a basic fortification. Lieutenant Close was also reportedly responsible for erecting a beacon stand at Signal Hill 'on which a coal fire was lit every evening'; it possibly replaced the one erected by Skottowe in 1813 (see Figure 3.6).

### **Signal Hill: signalling and navigation in Newcastle**

According to John Bingle, a resident of Newcastle from 1822 until his death in 1882, the 'coalfire beacon (similar to the primitive ones in Great Britain) was established on a hill called the Beacon Hill to be a warning and a guide to mariners.' The activity of lighting the coal-fired beacon was described in Henry Dangar's *Emigrants Guide for 1828*: 'There is a large coal fire lighted up every evening at sun-set on the point of land near the fort and signal station, simply on top of a mound a few feet above the surface. This fire consumes about ½ ton of coal per night, and gives a large, clear light, which can be seen in fine weather about 20 miles at sea.'<sup>8</sup>

The adjacent flagstaff also played a role in harbour navigation, by monitoring ships entering the harbour. Dangar reported that the signals conveyed 'from the fort to the town' were:

- Blue Ensign – a vessel of war
- Yellow Flag – a merchant ship
- Yellow Flag with a Red St Georges Cross – a brig
- Yellow Flag with a Blue St Andrews Cross – a schooner
- A Yellow and Blue (perpendicular) Flag – a cutter
- Red Flag – the pilot is on board the vessel coming in

The construction of a new lighthouse for Newcastle on Nobbys Head in 1857 left the 1822 coal beacon on Signal Hill redundant; it was last lit on 31 December 1857. Buildings on the site that had been associated with the signal station were modified for the use of Newcastle's Harbour Master, Captain D T Allan, and his large family, by 1860.

### **Signal Hill: early fortifications for Newcastle**

John Bingle, in recalling the early settlement of Newcastle, claimed that there were 'seven guns (of an unspecified type) placed on the point of the hill, in the shape of an earthen (sic) battery. They were used for salutes on high days and holidays, King's birthdays, and other rejoicings.' Henry Dangar included the fort in an inventory of public, or government, buildings in Newcastle. According to Dangar, the fort was located on the 'extremity of the neck of land commanding the entrance to the harbour, which is capable of being made very strong'. The name Fort Fiddlesticks was bestowed by the convicts because they perceived the fortifications to be ineffectual. Gunners were often injured by premature explosions, as recounted by Bingle: 'on more than one ...occasion the gunners suffered mutilation in body or limb, and it affords them no doubt a lively recollection of the memorable Fort Fiddlestick (sic) for the remainder of their days'.<sup>9</sup>

The outbreak of the Crimean War between England and Russia in 1853 presented a threat to the Australian colonies, including NSW, as outposts of the British Empire. The war prompted the selection of sites for defensive purposes in Sydney and somewhat belatedly, in the ports of Newcastle and Wollongong. In 1855, a volunteer artillery battery was established at Newcastle: the Third Battery Volunteer Artillery. According to local historian

<sup>8</sup> Bingle, op. cit., p 15; Henry Dangar, *Emigrant's Guide for 1828* p 54.

<sup>9</sup> Bingle, op. cit., p 15; Huntington, *History of Newcastle and Northern Districts 1897*, p 76 cited in Graham Wilson and Martin Davies, op. cit., c1983, p 6; Henry Dangar, *Emigrant's Guide for 1828*, p 48.

W J Goold, 'the officer-in-command was Captain Ewan McPherson, son of Major McPherson who had formerly commanded the military establishment at Newcastle ... Samuel Holt was First Lieutenant and the Sergeants were Dr Knaggs, S L Holt, Frederick Ash and John Burrowes.' In 1860, the Volunteer Rifles and the Naval Brigade were formed in Newcastle.<sup>10</sup> Fear of Russian invasion would continue through until the 1880s, which kept the voluntary forces in Newcastle on their toes.

Two 6 pounder guns were brought to Newcastle for use by the volunteer forces in the 1850s; this artillery was kept at the Military Barracks on Watt Street. The parade ground for volunteer forces in Newcastle was located on the corner of Lake Macquarie Road (now Darby Street) and Parry Street in the present-day suburb of Cooks Hill. The Military Barracks on Watt Street were used for accommodating the volunteer troops, the Imperial forces having vacated. It is likely that Signal Hill was used for artillery practice by the volunteers; this is borne out by photographic evidence (see Figures 3.9 and 3.10). According to Goold, '...a target was erected on Fortification Hill, now Fort Scratchley [in the c1860s or 70s], and here the Volunteers practiced, the Breakwater being the point from which the firing was conducted.'<sup>11</sup>

NSW gained responsible Government in 1856 under the *Constitution Act 1855*, which 'gave the New South Wales Parliament autonomy over the affairs of the colony'.<sup>12</sup> This meant that NSW was thenceforth responsible for designing and building its fortifications from the early 1860s onwards, although advice would be sought from British military experts including Peter Scratchley and William Jervois.

On 29 March 1862, *The Newcastle Chronicle* reported that 'there is no defence whatever to the harbour, for the two 6-pound pop-guns – for such they may be regarded in the present progressive age – that we possess may be looked upon as of no use whatever'.<sup>13</sup> With regards to earlier fortifications on the site, there were reportedly six guns 'buried in the sand' on Old Signal Hill in 1863-64. Captain Allan (Newcastle's Harbour Master and resident at the former Signal Station) regarded these armaments as obsolete, as recorded in testimony given by him to a Royal Commission on the defences of the Colony: 'there are only six guns, and those are not serviceable being all honeycombed with rust. I should not like to fire one of them'.<sup>14</sup>

In 1866, *The Newcastle Chronicle* reported that although 'three thirty-two pounders have been sent to Newcastle', that for 'defence to our harbour and shipping, they could be of little or no use. Nothing short of regular fortification can be effective against this heavy artillery carried by the iron-plated ships of the present day'. The guns were still at the fort in 1901 although they were still unmounted at this time.<sup>15</sup>

In October 1870, it was reported that a Board had been:

*...appointed by the Government to prosecute the work of harbour defences, and four or five of its members visited this port to ascertain how it could be best protected. A minute inspection was made of the Flagstaff Hill, the Gaol Hill, and the Cliffs, and the report was, we believe, reported to the Government, but it has not been made public as yet. ...in case of an invasion Newcastle, from being an extensive shipping and coal*

<sup>10</sup> W J Goold, 'The Volunteers', in the Newcastle and Hunter District Historical Society, June 1956 Vol X Part IX.

<sup>11</sup> W J Goold, *ibid.* 1956; R S Mort (ed), Fort Scratchley, Newcastle, New South Wales, The Council of the City of Newcastle, 2nd edition, Newcastle 1986, pp 9, 17.

<sup>12</sup> See: <http://www.premiers.nsw.gov.au/ThePremierAndGovernment/Government/SesquicentenaryOfResponsibleGovernment/Outline/meaningofresponsiblegovt.htm>

<sup>13</sup> *Newcastle Chronicle* 29 March 1862, p 2.

<sup>14</sup> Captain Allen cited in Graham Wilson and Martin Davies, *op. cit.*, c1983, p 9.

<sup>15</sup> *Newcastle Chronicle* 14 July 1866, p 2; R S Mort (ed), *op. cit.*, 1986, p 9.

*exporting port, would be amongst the first to attract the enemy's attention. ...Nature has given us greater advantages for defence than it has to any other seaport town. The Flagstaff Hill and the cliffs present the most eligible battery sites possible, and with an adequate supply of the recently invented long-range guns, vessels of war, however well equipped for destruction would never take the town. Batteries occupying such elevated positions could easily keep the enemy at bay, and the only way in which the town could be injuriously molested would be by shelling it, which it would be exceedingly difficult to do.'*<sup>16</sup>

In December 1870, *The Newcastle Chronicle*, in discussing the defences of NSW generally, claimed that: 'As yet, we (the Colony of NSW) are only in our infancy, and our territory being boundless, and our resources inexhaustible, it is not unreasonable to suppose that a covetous eye may, sooner or later, be cast upon us'.

The last remaining Imperial (British) troops had departed Australian shores in August 1870.<sup>17</sup> Under the *Military and Naval Forces Act of NSW 1871*, the Government was empowered to raise and maintain permanent naval and military forces in the colony. The NSW Artillery was raised on 1 August 1871, with its headquarters at Dawes Point.

The three 32 pounder smooth bore muzzle loaders (field guns) installed in 1866 were augmented with two 68 pound smooth bore muzzle loader guns temporarily mounted on traversing platforms by 1874. These were two of six guns brought to NSW in 1872 from the Royal Gun Factory in England. Of the remaining four, two were sent to Bare Island, one to Victoria Barracks and one to South Head. Four 80 pounder rifled muzzle loaders were installed at Fort Scratchley in 1878, as detailed below.<sup>18</sup>

### **The Temporary Fortress 1878**

The permanent fortress was preceded by a temporary fortress which was to safeguard Newcastle in the interim period before the construction of the new fortress. It was to be manned by a contingent of thirty artillery men who were to operate the two original 68 lb guns and four 80lb guns. (p12 vol II Wilson and Davies 1979).

The temporary fortifications were completed in around a month and a half, beginning in April 1878. This consisted of two defensive barriers or parapets (traverses), one facing the breakwater, and the other facing east, overlooking the ocean. Four 80 pounder guns were installed in the temporary fortifications. After an initial flurry of activity, the urgency abated and the construction of the permanent fort did not commence until 1881.

The torpedo firing station to be located at the end of Queens' Wharf was the first part of the coastal defence plan that was implemented, and a Newcastle foundry was contracted to construct five torpedo cylinders. (p11 Vol II Wilson and Davies 1979).

### **Construction of Fort Scratchley: 1878-1886**

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<sup>16</sup> *Newcastle Chronicle* 31 December 1870, p 2

<sup>17</sup> Peter Oppenheimer, *The Fragile Forts: the fixed defences of Sydney Harbour 1788-1963*, Army History Unit, Dept. of Defence, Canberra, ACT, 2004 p 87.

<sup>18</sup> NSW Government Architect's Office, *South Head Stage 1 Draft CMP Vol 1 2007*, p 61; R S Mort (ed), *Fort Scratchley*, Newcastle, New South Wales, The Council of the City of Newcastle, 2nd edition, Newcastle 1986, p 11.



In 1876, the NSW Government sought advice from Sir William Jervis to review the defences of the colony. Jervis continued in this advisory role until 1885. In 1877, he was joined by Lt Col Peter Scratchley to review NSW's coastal defence system; their emphasis was on providing an outer line of defence, as opposed to the inner line of defence as advocated by William Denison in the 1850s.

In early 1877, a Legislative Assembly address called for the immediate construction of defences in Newcastle. In early January 1877, Majors Roberts and Spalding visited Newcastle to inspect suitable sites for fortifications.<sup>19</sup>

On 15 May 1877, the *Newcastle Morning Herald* reported that Jervis and Scratchley, 'accompanied by Mr Moriarty, Colonial Richardson, and another gentlemen arrived in Newcastle, per *Coonanbara* for the purpose of inspecting and reporting up on the best sites for defending the city and harbour from attacks, in case of a war between England and any other power.' After resting at the Great Northern Hotel, the party journeyed to Captain Allan's Hill where 'a good view could be obtained of the coast and the position of the most important portions of the city, and some time was spent in examining the spot.' The party also inspected Nobbys Head and the 'cliff opposite the Asylum for Imbeciles'.<sup>20</sup>

The decision by Scratchley and Jervis to locate Newcastle's first major fortification at Signal Hill was because it was a strategic location for the defence of Newcastle in particular, and as part of the network coastal defences in NSW more generally. The site was elevated above the town and overlooked the entrance to Port Hunter and the Hunter River to the north-east, but it also afforded views north and south along the NSW coast.

On 1 April 1878, the *Newcastle Morning Herald* reported that a workforce of twenty-five men had been put to work to build temporary defences for the town: 'under the superintendence of Mr Barnett, the Colonial Architect, four large guns have to be mounted and made ready for use, on Captain Allan's Hill, within eighteen days. Two of these guns will point seaward, whilst the other two will command the harbour, and be ready for effective service, at any moment. In addition to this, a large staff of men will be started on the permanent fortifications, which will be commenced simultaneously with the erection of the temporary guns.' The four 80-pounder RML guns were placed in the temporary battery by mid May, and huts for the artillery-men were completed by June.<sup>21</sup>

By 12 April 1878, plans for the Newcastle fortifications were completed. These plans had been executed under the direction of Colonel Scratchley, by French-born engineer Gustave Morrell, an employee of the NSW Department of Public Works.<sup>22</sup>

Jervis and Scratchley believed that of all the ports on the NSW coast, Sydney and Newcastle were capable of supplying an enemy fleet whose provisions would be depleted after a considerable journey from any foreign port. Consequently these places would be the most likely to be attacked. Based on the assumption that Britannia would continue to rule the waves, land defence was to consist of closed fortifications with barracks. Firing power would consist of four 80 pounders in an underground casemate and three 9 inch rifled muzzle loaders mounted *en barbette*. Magazines and shell storage were to be underground.

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<sup>19</sup> Legislative Assembly Votes & Proceedings Vol 31 A420; *Newcastle Morning Herald*, 9 January 1877 p 2.

<sup>20</sup> *Newcastle Morning Herald*, 15 May 1877 p 2.

<sup>21</sup> *Newcastle Morning Herald*, 1 April 1878; *Newcastle Morning Herald*, 1 May 1878.

<sup>22</sup> *Newcastle Morning Herald*, 12 April 1878; *Newcastle Morning Herald*, 14 October 1880, p 3; R S Mort (ed), op. cit., 1986, p 9.

In June 1880, tenders were invited for 'Construction of fortifications at Newcastle'. Work began in earnest in early 1881, but progress was plagued by problems of undermining from the early coal mines on the site. In May 1881, Colonels Scratchley and Roberts visited Newcastle to inspect the works: 'the object of their visit (was) to examine the old coal workings under the base of the hill, with reference to the possible dangers.' Advice was sought from the NSW Examiner of coal, a former convict coal miner at Signal Hill and the manager of the Lambton Colliery, about how to best seal the former mine shafts and tunnels to 'safely bear the superincumbent weight'.<sup>23</sup>

In early October 1881, the four 80 pounder guns were lowered into the casemates to enable other construction works at the fort to be carried out. By mid October, it was reported that 'the various passages from the battery to the main magazine are all completed, as also the lift, through which the shells are received. The battery for the 9-inch guns is awaiting their reception. The look-out post possesses a very finished appearance. Turfing and masonry are being pushed on with all speed, and a gang of men are hard at work, asphaltting the main magazine. An incline is also being made from the battery to the sea...' <sup>24</sup> Artillery was placed into position on 3 April 1882, as reported in the *Newcastle Morning Herald*: 'Yesterday the last of the heavy guns in connection with the fortification armament on Allan's Hill was finally placed in position. The arming of the port may therefore now be looked upon as completed.'<sup>25</sup>

Meanwhile, Signal Hill continued to carry out navigation functions for ships leaving and entering the port. A new flagstaff for 'hoisting storm signals' was erected in 1869; this was followed by the erection of a new signal mast 'on Captain Allen's Hill' in January 1877, on which 'the descriptive flags hitherto used on Nobbys' were hoisted. This change was 'approved of in shipping circles' largely because Signal Hill 'being near town, there will be less difficulty in discerning the class of flags'.<sup>26</sup> The Signal Station was temporarily moved to Nobbys Head from 1882 until 1898, moving there permanently in 1914 (the Signal Station operated at Fort Scratchley from 1898 to 1914).

The above-ground barracks, designed by Colonial Architect James Barnet took 11 months to build and were completed by April 1886. The barracks included the Commandant's Quarters, Main Barracks, Guardhouse with two cells, laboratory, toilet and bathing blocks. The main buildings were built of brick and rendered on the exterior to imitate sandstone blocks set to a coarse ashlar bond. The buildings had wooden floors, concrete and cement rendered walls, a timber framed roof of corrugated iron and were surrounded by a sandstone paved verandah eight feet wide. The officers' quarters faced north-east and the NCOs' kitchen was on the east with their quarters to the west. The laboratory situated in the south-east corner behind the armoury was used for packing shells. Toilet blocks were in the south-east and south-west corners.<sup>27</sup>

During June 1885, blasting was carried out to remove any remaining obstructions on the hill. Work was also carried out to complete the fort's independent underground water system consisting of eight tanks with a total capacity of 90,000 gallons. These reservoirs are located beneath the main courtyard between the barracks and the guardhouse and underneath the parade ground.

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23 NSW Government Gazette 15 June 1880; R S Mort (ed), *ibid.*, 1986, p 9; *Newcastle Morning Herald*, 6 May 1881, p 2; *Newcastle Morning Herald*, 20 May 1881, p 2; *Newcastle Morning Herald*, 24 May 1881, p 2.

24 *Newcastle Morning Herald*, 10 October 1881, p 2; *Newcastle Morning Herald*, 13 October 1881, p 2.

25 *Newcastle Morning Herald*, 4 April 1882; R S Mort (ed), *op. cit.*, p 12

26 R S Mort (ed), *ibid.*, p 9; *Newcastle Morning Herald*, 26 January 1877, p 2.

27 R S Mort (ed), *ibid.*, 1986, p 9; *Newcastle Morning Herald*, 26 January 1877, p 13.

In 1887, a recommendation by Major General Shaw to further upgrade NSW defences included a second gun battery for Newcastle at Shepherds Hill (around 1km to the south of Fort Scratchley). This year saw the first official use of the term Fort Scratchley, on 9 September 1887, in honour of Sir Peter Scratchley who had died *en route* to Australia after contracting malaria in Papua New Guinea.<sup>28</sup>

### **Modifications to Fort Scratchley: 1889-1911**

The late Nineteenth century saw rapid advances in military technology, especially in Europe. By the 1880s, casemate batteries had become expensive to construct, and moreover they offered inadequate protection to gun crews. In 1889, it was decided to re-arm Fort Scratchley with more modern weapons in order to bring it into line with European standards.

In February 1889, a tender by James Russell was accepted to extensively remodel the gun pits, and to build a new gun pit immediately to the east of the casemate battery. According to military historian R S Mort, 'the pits were deepened to nine feet eight inches, a casemated section to the rear of each gun was provided for the gun crew, and new shell recesses and arms stores were constructed. Most of the lower level was not altered and existing shell-lifts were used.' A tram from Parnell Place used to transport the building materials, including 14,000 tons of Melbourne blue metal.<sup>29</sup>

Four new disappearing guns were installed at this time: one 8 inch BL and three 6 inch BL guns, all on an eastern arc. The three 6 inch BL guns on disappearing mountings replaced the three 9 inch RML guns. Using a hydro-pneumatic system, the 6 inch disappearing guns could be aimed and loaded below parapet level; a valve would release and the gun would rise above the parapet, the gun would fire, and then be forced back down by the recoil. A single 8 inch BL disappearing gun was later added to the north of these emplacements.

In 1889, the Signal Station / lookout house was demolished and the associated northern signal mast used by the harbour pilot was also removed; these structures occupied the position where the new 8 inch disappearing gun was to be installed. A new octagonal-shaped Signal Station was built next to the parade ground. It continued operations at Fort Scratchley until the beginning of the First World War. With the removal of the Signal Station in 1914, civilian use of Fort Scratchley ended.

Newcastle's harbour defences were boosted in 1889, with the laying of 20 submarine mines along the entrance to the harbour on the bottom of the harbour channel. A below ground mine remote control emplacement was established at the western end of the dry ditch overlooking the harbour. An electrical link was laid so that detonation could be set off from either the fort or the pilot station at the base of the hill. Newcastle's torpedo defence system was manned by the Submarine Miners.

The perimeter fortifications for Fort Scratchley comprising a 170 foot long loop-holed brick and concrete wall with gates inside the trench were begun in 1889 and were completed by 1891.

Major modification works at Fort Scratchley were completed by 1892 although minor alterations to the layout of the area around the battery continued throughout the 1890s.

In 1892-93, the range finding and gun captain's positions were changed from their original location between the gun pits. The two new positions were constructed in the left and right

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<sup>28</sup> R S Mort (ed), *ibid.*, 1986, p 7.

<sup>29</sup> R S Mort (ed), *ibid.*, 1986, p 13.

flanks of the disappearing guns. A third position for fire commander was built to the rear of the parade ground overlooking the centre of the gun battery. These positions were all exposed and provided little cover from the elements or from the rear.

In 1894-95, these positions were rebuilt in an expanded form with wrought iron roofs and shutters. Depression range finders were also installed allowing the range and bearing of incoming ships to be accurately gauged. During this period, two 1.5 inch Nordenfeldt quick-firing machine guns were installed, one above the casemate at Fort Scratchley and the other at Torpedo Point. It was believed that with the development of small fast boats, the 80 pounders could not be fired rapidly enough.

Fort Scratchley was described in detail in the *Newcastle Morning Herald* on 22 December 1894:

*From the hill a complete system of submarine mines protecting the entrance of the port can be directed and controlled. The artillery armament is on a considerable scale, and includes three six-inch breech loading rifled guns with hydro-pneumatic elevating carriages, while another eight-inch gun of a similar type will shortly be replaced in position. The magazine arrangements and equipment are also on a large scale. Here is stationed a detachment of Permanent Artillery, while the companies of local volunteer artillery are practiced all year round in everything connected with the handling and use of big guns. On the hill is the signal station for the port, and flags are generally seen flying all day long intimating the sighting of vessels. Around the hill a road has been cut, which forms a pleasant carriage drive.<sup>30</sup>*

In 1896, Newcastle's fortifications were augmented when a battery was constructed at Shepherds Hill, armed with an 8 inch BL disappearing gun.

In 1898, the three 80 pounder RML casemated guns were removed and replaced with three 1.5 inch Nordenfeldt quick firing guns; two five barrel Nordenfeldt 45mm machine guns were also added to the fort's armaments for land defence. The Nordenfeldt guns replaced the 80 pounder RML guns in the casemate. Passageways behind the gun emplacements on the upper level were covered to form tunnels.<sup>31</sup>

In August 1898, a new 8 inch BL Armstrong gun was mounted at Fort Scratchley. The mounting of this gun was supervised by Captain Morris of the Permanent Artillery. Thirty artillerymen were required to move it from the roadway to the south-eastern face of the fort and then to lift it over the parapet. The new gun reportedly weighed 12 tons, was 20ft long, and of a modern type, and was capable of throwing a projectile weighing 150lb.<sup>32</sup>

With Federation in 1901, the former Colonial armed forces were amalgamated. When the newly formed Federal Government of Australia took control of NSW defences, armaments were standardised, which created an opportunity to replace obsolete equipment. At Fort Scratchley, the single remaining 80 pounder RML gun *en barbette* immediately adjoining the casemate battery was considered obsolete and was eventually removed in 1907.

As a result of further improvements in military technology, which rendered disappearing guns obsolete, a further modification occurred at Fort Scratchley in 1911 with the removal of the 8 inch disappearing gun and the adjacent 6 inch weapon. The gun pit for the 8 inch gun was filled to allow for the placement of a new 6 inch Mk VII BL gun. A second 6 inch Mk VII BL gun was mounted at ground level between the central and northern disappearing

<sup>30</sup> *Newcastle Morning Herald*, 22 December 1894

<sup>31</sup> R S Mort (ed), op. cit. 1986, p 13

<sup>32</sup> *Newcastle Morning Herald*, 16 August 1898 p 5

gun pits. The northern disappearing gun pit had a roof added with the steel shield from the 'old' disappearing gun set into the concrete. The area was then used as a shell store.

The following year, an observation post and signal tower were constructed, and the Nordenfeldt gun was removed from eastern end of the casemate battery and the emplacement converted to a magazine area. The two remaining disappearing guns appear to have been retained until 1937. New shell and armoury stores were built around the guns and the shell lifts were modified in 1913, as well as a new access to the existing tunnel complex, provided by stairs between the guns.

A further augmentation of Newcastle's outer line of defence came with the construction of Fort Wallace, near Stockton, in 1912-13, which was armed with two 6 inch MK VII guns.

A grass fire broke out on the northern side of Fort Scratchley in January 1913, although it did not cause any damage to the fortifications or the nearby houses.<sup>33</sup> The following year, the Signal Station moved to Nobbys Head permanently. The First World War broke out in 1914 and ended in 1918; Fort Scratchley did not see any action during the war years.

The 39th Fortress Company of the Royal Australian Engineers (RAE) was based at Fort Scratchley from at least c1921; this unit was responsible for operating the searchlights at the fort. In 1929, Captain Klein of the Staff Corps announced changes 'to the voluntary enlistment scheme, as affecting Newcastle Fortress Units'. This was to be the beginning of Newcastle's own resident militia, the 13th Heavy Battery AGA (eventually renamed the 113th Heavy Battery RAA), who were responsible for manning the guns. The Permanent Military Force at Fort Scratchley was the 3rd Heavy Battery RAA, which was commanded by the Staff Corps officer. Soldiers from the unit occupied the above-ground barracks at the fort.<sup>34</sup>

### **Modifications to Fort Scratchley & WWII: 1939-1945**

Fort Scratchley underwent further alterations immediately prior to the outbreak of the Second World War. A second level was added to the c1911 observation post, and modifications were made to the blast walls of the eastern battery.

In 1939, Major P W Dobson became Fortress Commander at Newcastle and Captain R S Mort was promoted to Commanding Officer of the 113 Heavy Battery RAA; he had joined the unit in 1924. Mort's long-term and close association with the fort enabled him to write a definitive history of Fort Scratchley in his retirement.<sup>35</sup>

In May 1940, a new recreation / dance hall was opened at the fort, which was celebrated with a dance 'attended by many members of the heavy artillery, fortress engineers and 2nd Garrison Battalion'. During the 1940s, two further additions were made in the courtyard area: a Rations Block was erected between the western guard house and bathrooms, and a searchlight directing station was built in the south-eastern corner, to control the three fight lights for the fort.<sup>36</sup>

Fort Scratchley, along with the other defensive positions in Newcastle, experienced an eventful year in 1942. In this year, a number of modifications were carried out on Newcastle's close defence system: the four 3 pounder guns mounted in small circular emplacements were replaced with a twin 6 pound 10 cwt emplacement at the base of Nobbys Head, which covered the river entrance and boom defence.

<sup>33</sup> *Newcastle Morning Herald*, 2 January 1913.

<sup>34</sup> *Newcastle Morning Herald*, 11 April 1921, p 6; 4 December 1929, p 12 & 8 January 1938 p 14; R S Mort (ed), op. cit., 1986, p 27.

<sup>35</sup> *Newcastle Morning Herald*, 10 October 1939.

<sup>36</sup> *Newcastle Morning Herald*, 16 May 1940.

On the evening of 7-8 June 1942, Fort Scratchley saw its first and only hostile action when a Japanese submarine, the I-21 commanded by Captain Kanji Matsumaura, shelled Newcastle. The guns used to fire at the Japanese submarine were the 6 inch BL Mk II guns installed in 1911. Major Watson, then commander at Fort Scratchley, recalled the attack forty years later, in 1982:

*Before I had gone to sleep I heard the alarm bells. I cursed a little and concluded that some clown had accidentally triggered the alarm system. Then I heard gunfire. It wasn't our own. I raced out of bed, pulled on a dressing gown and slippers and ran to the OP (operations room). I raised the battery alarm and then I saw a star-shell over Stockton Bight and directed staff to observe the position closely. Bombardier Curry reported a gun flash and I ordered the guns to lock on the bearing. ...Unfortunately one gun reported a misfire (it turned out later that a tube had been bent). The first gun fired, the second one corrected the fault, and fired immediately after. During this time, there was one round from the submarine and I heard it going past making a peculiar whizzing sound. I screamed "duck" to the OP personnel as we felt the round going past the OP.*

According to Watson, only seven live rounds were fired from the Japanese submarine, of which four were 'duds'; one of these unexploded shells landed in the BHP steelworks.<sup>37</sup>

Bombardier Stanley Newton was reportedly the only man injured in the attack. On approaching Fort Scratchley, '...he noted that most shells were not exploding. He presumed they were duds, and undaunted, continued on. As he did so, a shell landed on the road, bounced, and spun towards the hard concrete kerb. With second thoughts about its being a dud, he momentarily froze, and then headed for cover in a doorway. The shell exploded, hurling Bombardier Newtown through the air and stunning him. He awoke to greet a surprised air-raid warden. Feeling quite fit, and unaware of a piece of shrapnel lodged in his forehead, he ran on to the Fort to take his position.'<sup>38</sup>

Fort Scratchley accepted its first intake of female officers and other ranks from the Australian Women's Army Service (AWAS) in October 1942; they were accommodated at Nobbys and in two huts outside the perimeter walls of the fort. The AWAS were responsible for observing the radar at Nobbys and for undertaking communications duties and plotting room work at Fort Scratchley. Other Army units stationed at the fort during the war included the 113 Heavy Battery, 39th Fortress Company and the 2nd Garrison Battalion.

During the war, Fort Scratchley was incorporated into the network of gun emplacements around Newcastle and its guns were limited to close range defence. Fort Wallace with 9.2 inch guns, Shepherds Hill and Tomaree Heads with 6 inch guns (near Port Stephens) acted as the forward line of coastal defence. All defences for Newcastle were controlled from the observation post at Shepherds Hill, which was then known as the Park Battery Observation Post.

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<sup>37</sup> *Newcastle Morning Herald*, 5 April 1982, p 11

<sup>38</sup> R S Mort (ed), op. cit., 1986, p 31.

### **Fort Scratchley: military use after WWII 1945-1972**

Immediately following the Second World War, the number of permanent troops based at Fort Scratchley was dramatically reduced because 'all non-permanent troops were demobilised' from the armed services. A skeleton crew of around 30 personnel based at the fort from 1946 to 1952 'performed essential duties of returning warlike stores to Ordnance Depots and maintaining the guns, instruments etc.'; the battery was called the 2 Coastal Artillery Battery Newcastle in this period.<sup>39</sup>

At the close of the war, Italian prisoners of war (POWs) were accommodated at Fort Scratchley for up to two years from 1945, until they were repatriated.<sup>40</sup>

In October 1951, 'a small brass cannon and two larger cannon, believed to be the original guns installed at Fort Scratchley, were lifted from the fort moat ...and sent to Sydney' where they were intended to be installed as ornamentation for the Army Barracks at Georges Heights. The cannon had been discovered during the Second World War by Bombardier Newton while digging trenches for electric cables in the vicinity of the 'Cottage'; this was the same soldier who had been wounded by the shelling from the Japanese submarine attack in July 1942. The cannon were subsequently discarded into the fort's moat.

When rediscovered in 1951, the bronze cannon (dated to c1798) were assumed to have 'been put in place at least no later than the regime of Commandant Wallace, long before 1820'. It is likely that this weapon was a 'timing gun', which fired a single shot every day to mark 1 o'clock. Today, it is thought to be located at Puckapunyal Army Barracks in Victoria. The two other muzzle loader cannon were inscribed with the date 11/3/19 on their barrels, suggesting they were 'those that were erected on the heights overlooking Nobbys during the regime of Major Morisset' between 1818 and 1823, although it is more likely that they were installed at Signal Hill in the 1840s. These two 68 pounder cannon have since been relocated to Stroud.<sup>41</sup>

The National Service Scheme was reinstated in 1951 by the Menzies Government, and the in the following year, 'the nucleus of a unit to man the Fort was established'. Fort Scratchley was used by the National Service Scheme for militia training; this unit, the 13 Medium Coast Battery RAA, was commanded by Major R S Mort. From 1948 to 1954 the 15<sup>th</sup> Northern River Lancers , a CMF amphibious tank unit was associated with the fort. The battery was renamed the 113 Medium Coast Battery RAA from 1956 to 1960, and as the 113 Coast Battery RAA from 1960 to 1962.<sup>42</sup>

With advances in military technology from the late 1950s onwards, particularly relating to aircraft, fixed coastal defences such as Fort Scratchley were considered obsolete. By c1962, coastal artillery at Fort Scratchley was abandoned, and the fort became the base of a light anti-aircraft battery armed with 40mm Bofors guns; the unit based here was the 113 Light Anti-Aircraft Battery RAA. The remaining 6 inch Mk VII guns at the fort, which had been the only two coastal guns in NSW used in combat during the Second World War, were fired for the last time in night target practice in March 1962.

Carl Christie was Commander at Fort Scratchley from 1960 to 1972; he recounts that the fort was used as a depot for the 113 Light Anti-Aircraft Battery RAA, and that the inner part

39 Carl Christie, Pers. Comm. December 2007; R S Mort (ed), *ibid.*, 1986, p 35.

40 Susan Kerrigan, <http://www.fortscratchley.org>

41 *Newcastle Morning Herald*, 17 October 1951; Susan Kerrigan, <http://www.fortscratchley.org>

42 R S Mort (ed), *op. cit.*, 1986, p 31.

of the fortifications were not used by the Army in this period.<sup>43</sup> The guns were primarily used for training, and the buildings for administration. Army camps continued at the site until the 1970s.

On 11 March 1964, it was reported that the Army was deferring selling 'old guns (from Fort Scratchley) for scrap till the council finds about £800 to transfer them to Obelisk Park.' It appears that the remaining 6 inch Mk VII guns from Fort Scratchley were relocated to the park in c1965, although the 7 ½ inch ton steel pedestals were scrapped. These guns were later returned to Fort Scratchley in c1978, and in 1984 were placed on pedestals relocated from Georges Heights.<sup>44</sup> The work was carried out by the Department of Housing and Construction with approval of the Australian Heritage Commission. Transport was provided from Sydney by Army low loader. This was the first step towards conservation of the Mark VII guns which were later restored to working order by members of the Fort Scratchley Historical Society.

### **Fort Scratchley: conservation and reconstruction 1972-present**

In 1972, the Australian Army vacated Fort Scratchley and the nearby Camp Shortland, which were described as 'two of the choicest pieces of real estate in Newcastle East'. At this time, the 113 Light Anti-Aircraft Battery RAA was relocated to Adamstown and reverted to field artillery.

Holding maintenance works commenced two years later in 1974. However, the buildings and tunnels at Fort Scratchley suffered considerable damage after the Army vacated due to vandalism and corrosion, and without the permanent and volunteer units constantly cleaning, sweeping and whitewashing, the slide into disrepair of the buildings and underground tunnel system was exacerbated.<sup>45</sup>

Newcastle City Council was given control of the fort site in 1977, following considerable debate and negotiation between the Council, local community, and the State and Federal Governments. The Commonwealth Government agreed to accept responsibility for upgrading the site and handing it over to the Council. Further conservation works were carried out by the (Commonwealth) Department of Housing and Construction, beginning with works to secure the site, tunnels and barracks. Following these works, the Newcastle Maritime Museum became the new tenants, occupying Buildings 20, 21 and 22; the museum proved to be a popular tourist attraction for Newcastle. In October the same year, the fort became the site for a community theatre project which interpreted the 1942 attack on Newcastle, titled 'Shooting at Fort Scratchley'. From c1981 to the mid 1990s, the Hunter Valley Theatre staged a range of children's theatre productions at the fort; similarly the local Zeal and Footloose Theatres wrote and performed plays at Fort Scratchley which explored the history of Newcastle.<sup>46</sup>

In 1978, Fort Scratchley was placed on the Register of the National Estate. From this time, restoration works were undertaken in earnest (although remediation works had begun four years earlier) and continued for the next six years. Works between 1974 and 1984 included the reconstruction of the front gates; re-roofing of the above-ground barracks buildings; installation of new lighting in the tunnels; relocation of pedestals; sealing the surface of the parade ground, reconstruction of the flagstaff; restoration of the BOP; hoists and tunnel upgrade; and upgrading of services throughout the site.

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43 Carl Christie, Pers. Comm., December 2007.

44 *Newcastle Morning Herald*, 11 March 1964.

45 *Newcastle Morning Herald*, 7 October 1972.

46 R S Mort (ed), op. cit., 1986, p 35; Susan Kerrigan, <http://www.fortscratchley.org>



The volunteer-run Fort Scratchley Military Museum Society, later known as the Fort Scratchley Historical Society, was established by the end of January 1982 in order 'to establish the Fort Scratchley Military Museum in the restored Commandant's Cottage'. The seeds of this idea were formed during Heritage Week in March 1981 when the Commonwealth's project architect Bruce Dawbin organised a 'display of photographs, documents, plans and a few artefacts' at Fort Scratchley. A steering committee was formed to establish a military museum at the site in May 1981. Early members of the society included several retired officers formerly stationed at the Fort including Lt Colonel Dick Mort, Sergeant Stan Newton, Carl Christie, Gunner Bill Rolfe, and Melissa Cameron of the AWAS. The first president was Ern Boulton.

Fort Scratchley celebrated its centenary on 3 April 1982, which was marked by an open day and the official opening of 'the new military museum' by Major-General John Whitelaw. The museum, which included exhibits of 'medals, old photographs, small arms, uniforms and artefacts found during excavation work', had been opened to the public seven weeks previously. The tunnels were also opened to the public for the first time. Visitors to the open day included Mr A Simkus and Jim Woollet, both 'soldiers who manned the guns at Fort Scratchley during World War 1', as well as Stanley Newton, who was a soldier injured in the submarine attack on Newcastle in 1942.<sup>47</sup> The Opening was also attended by Lt Colonel Dick Wearne, the curator of the Victoria Barracks Military Museum, a strong supporter of the fledgling museum.

Another important occasion for Fort Scratchley was the reconstruction and erection of the flagstaff in 1982. This occasion was marked by the attendance of Bill Rolfe (aged 97) who was a gunner stationed at the Fort in 1910, and Stan Newton who was stationed at the Fort during WW2.

The museum consolidated its collection in the Commandants Cottage for the next 22 years and continued to conduct tours through the tunnels which were a major attraction for the site. The former Artillery Store was converted into a museum shop, ticket office and information post for the tunnels. In 1983, the Newcastle Marine Archaeological Museum established a workshop and research centre in the former Gunners' and NCOs' bathroom and wash house, and occupied the site until the mid 1990s.<sup>48</sup> In the early 1980s a full time curator was appointed at the Newcastle Maritime Museum, initially George Imashev, who was succeeded by Richard Morgan.

An extensive conservation and refurbishment program was carried out from 1978 to 1984 by the staff of the Department of Housing and Construction (formerly Commonwealth Department of Works) at the Adamstown Area Office and Works Depot. Under the direction of Area Manager Greg Radecki and coordinated by project architect Bruce Dawbin, all trades were provided by the Works Depot. (The Works Depot had only recently relocated in 1976 from the SES site, below the Fort). Bill Cook and his joinery team provided all joinery for the Commandant's Cottage restoration, the gates reconstruction, tunnels, armouries and the flagstaff reconstruction. Specialist work included the cast iron columns and bollards by Goninans, Newcastle and the replica copper lamps at the gate pillars, which were custom made in Sydney. Conservation works were carried out over the entire site, funded by an annual budget of around \$60,000 for the Department of Administrative Services over the 6 year period.

In 1993, a Conservation Management Plan was prepared for the site by the heritage firm Godden Mackay.

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47 Newcastle Morning Herald, 3 April 1982 & 5 April 1982, p 11; Simkus was stationed with the 3rd company, Australian Garrison Artillery at the fort, see R S Mort (ed), *ibid.*, 1986, p 35.

48 R S Mort (ed), *op. cit.*, 1986, p 35.

In 2000, a 1850s 80 pounder muzzle loader cannon 'which had ended its life as a counterweight in a heavy engineering workshop' was restored by apprentices from the Hunter Valley Training Company. The cannon was placed into one of the casemates at Fort Scratchley and ceremonially fired in 2001 to mark Australia's Centenary of Federation.<sup>49</sup>

Fort Scratchley was closed to the public for conservation and reconstruction works in 2004, and the Newcastle Maritime Museum and the Fort Scratchley Historical Society were relocated to other sites in Newcastle. These works to the fort have included new site infrastructure; structural repairs; repairs to the tunnels including waterproofing the roofs; metals conservation; improved site access; replacement of the transport garage; and construction of a new Multi Purpose centre.

Fort Scratchley is anticipated to re-open in 2008 following transfer of ownership from the Commonwealth Government to Newcastle City Council. After the re-opening the Fort Scratchley Historical Society will contribute to the day-to-day management of visitors, access to Fort experiences , displays and carry out some curatorial activities under the direction of Newcastle City Council.

## Time line

1797 - Lieutenant John Shortland discovers the entrance to the Hunter River on 9 September 1797; the harbour and river are named Coal Harbour and Coal River, because of the abundant surface coal deposits found in the area.

1801 - First attempt to establish a European settlement at present day Newcastle; the site of Fort Scratchley is known as Colliers Point (hereafter the term Signal Hill will be used in this timeline prior to the construction of the fort).

1802 - The settlement at Coal Harbour / Coal River fails; convicts and soldiers are recalled to Sydney.

1804 - Second attempt to establish a permanent settlement at Newcastle in April, in direct response to a convict uprising at Vinegar Hill the month before. The settlement, established as a site of secondary punishment for re-offending convicts, is originally named King's Town but later renamed Newcastle.

1813 - Coal beacon and flag staff to aid harbour navigation are erected on Signal Hill; the 'flagstaff' is recorded in 1819 as 'a small stone tower with Lighthouse'.

1817 - Coal Mining at Signal Hill ceases.

1818 - Construction begins on a pier to connect Nobbys Island to the mainland at the base of Signal Hill; it is named Macquarie Pier for the Governor.

1822 - Newcastle is abandoned as a site of secondary punishment and opened up to free settlers. In this year, engineer Lieutenant Close oversees construction of a pagoda-style structure on Signal Hill as well as a beacon stand 'on which a coal fire was lit every evening'. Close also oversees a basic earthen battery armed with seven guns, unofficially called Fort Fiddlesticks because of its perceived ineffectuality.

1836 - An eight lamp lighthouse is built on the site; Fort Fiddlesticks is still operational at this time.

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<sup>49</sup> Heritage Trades Training, June 2001

1853 - Outbreak of the Crimean War between England and Russia.

1855 – Organisation of volunteer forces in NSW; local citizens form the Third Battery Volunteer Artillery at Newcastle in response to the threat of invasion from Russia.

1856 - Introduction of Responsible Government in NSW.

1857 - Construction of a lighthouse on Nobbys Head renders the 1822 coal beacon on Signal Hill redundant. Harbour Master Captain David Allan moves into the Signal Masters cottage at Signal Hill.

1860 - Formation of the Newcastle Volunteer Rifles and Naval Brigade; Signal Hill used for target practice through to the 1870s.

1863-64 - Captain Allan testifies at the Royal Commission on the defences of the Colony that there are six guns 'buried in the sand' on 'Old Signal Hill'.

1866 - Three 32 pound smooth bore muzzle loading field guns are sent to Newcastle, and installed at Signal Hill to protect the harbour entrance.

1869 - New flagstaff for hoisting storm signals is erected on Signal Hill.

1870 - A Board is appointed by the Government to improve harbour defences in the Colony. Board members visit Newcastle and inspect Flagstaff Hill, the Gaol Hill, and the Cliffs as possible defence sites. The last remaining Imperial troops depart Australian shores on 23 August 1870.

1871 - The Military and Naval Forces Act of NSW 1871 empowers the Government to raise and maintain permanent naval and military forces in the colony. The NSW Artillery is raised on 1 August 1871, with its headquarters at Dawes Point.

1871-1914 - 1 O'clock gun fired at from Fort Scratchley to synchronise the time ball at Customs House.

1872 - Six guns are brought to NSW from the Royal Gun Factory in England in 1872; two of these are sent to Signal Hill.

1874 - Two 68 pound smooth bore muzzle loader guns temporarily mounted on traversing platforms at Signal Hill (replacing the two 32 pounder guns installed in 1866).

1876 - Ongoing hostilities between Russia and England; NSW Government seeks advice from Sir William Jervois to review colonial defences.

1877 - A Legislative Assembly address calls for the immediate construction of defences in Newcastle. In January, Majors Roberts and Spallding visit Newcastle to inspect suitable sites to establish additional defences. Jervois is joined by Lt Col Peter Scratchley to review NSW's coastal defence system; their emphasis is on providing an outer line of defence (as opposed to the inner line of defence as advocated by Denison in the 1850s). Scratchley and Jervois visit Newcastle in May, and select Signal Hill as a future fort site; they recommend three 9 inch rifle muzzle loading guns be emplaced on the site. A new signal mast is installed on Signal Hill.

1878 - In April, work begins on temporary defences for Newcastle at Signal Hill, supervised by the Colonial Architect James Barnet. Four 80-pounder RML guns are placed in the temporary battery by mid May, and huts for the artillery-men are completed by June.

1880 - Construction begins on permanent fortifications at Signal Hill to a design by French-born engineer Gustave A. Morrell from the NSW Department of Public Works (plans approved by Jervois and Scratchley).

1881 - Scratchley and Roberts visit Newcastle in May to inspect the progress of works being carried out on the fortifications.

1882 - Artillery is placed into position within the fort, comprising a battery of three 9 inch RML guns mounted 'en barbette' to cover seaward approaches, three 80 pounder RML casemated guns to protect the harbour entrance and one 80 pounder RML to cover the inner harbour and the river approaches to the city. The Signal Station is temporarily removed to Nobbys Head until 1898 and moved there permanently in 1914 (the Signal Station operated at Fort Scratchley 1898-1914).

1883 - Plans submitted for accommodation for permanent troops (i.e. barracks etc) in September 1883; tender is called for their construction in March 1885.

1885 - Sir Peter Henry Scratchley dies *en route* to Australia after contracting malaria in Papua New Guinea; the name Fort Scratchley becomes official name for the fortification on Signal Hill from at least 1887.

1886 - The above-ground barracks, designed by Colonial Architect James Barnet, take 11 months to build and are completed by April 1886; the barracks include the Commandant's Quarters, Main Barracks, Guardhouse with two cells, laboratory, toilet and bathing blocks; also dry ditch and defensive wall.

1887 - A recommendation by Major General Shaw to upgrade NSW defences includes a second gun battery for Newcastle at Shepherds Hill (around 1km to the south of Fort Scratchley).

1889-1891 - Tender is accepted to extensively remodel the gun pits, and to build a new gun pit immediately east of existing gun pits (James Barnet's suggestion to remove the northern signal mast used by the harbour pilot and to replace it with a new gun pit is carried out). A tram from Parnell Place is used to transport building materials. Four disappearing guns are mounted in 1889, supervised by Major General Edwards. Perimeter fortifications for Fort Scratchley comprising a 170 foot long loop-holed brick and concrete wall with gates inside the trench are begun in 1889; works are completed by 1891.

1889-1892 - Newcastle's harbour defences are boosted by the laying of 20 submarine mines along entrance to the harbour. Newcastle's torpedo defence system is manned by the Submarine Miners.

1892-93 - The range finding and gun captain's positions are changed at Fort Scratchley from their original location between the gun pits. Two new positions are constructed in the left and right flanks of the disappearing guns. A third position for fire commander is built to the rear of the parade ground overlooking the centre of the gun battery.

1894-95 - The range finding and gun captain's positions are rebuilt in an expanded form with wrought iron roofs and shutters. Depression range finders are also installed allowing the range and bearing of incoming ships to be accurately gauged. Two 1.5 inch Nordenfeldt quick firing machine guns are installed, one above the casemate at Fort Scratchley and the other at Torpedo Point (both are removed in 1918); 'an additional,

previously stored 1.5 inch gun' is also installed. The Nordenfeldt guns replaced the (three) 80 pounder RML guns in the casemate; last remaining 80 pounder was removed from Fort Scratchley in 1907.

1896 - A battery is constructed at Shepherds Hill, armed with an 8 inch disappearing gun.

1898 - A new 8 inch gun is installed.

1901 - Control of NSW defences is taken over by the newly formed Commonwealth Government of Australia.

1907 - The last remaining 80 pounder RML gun in the western barbette immediately adjoining the casemate battery is removed.

1909 - Two of the 68 pounder guns are removed to Stroud

1910-11 - The fortifications are enlarged. An observation post and a signal tower are constructed. The Nordenfeldt gun is removed from eastern end of the casemate battery and the emplacement converted to a magazine. A 6 inch Mark VII BL gun replaces the four disappearing guns, and a second 6 inch gun is placed at ground level between the central and northern disappearing guns. A roof is added to the northern disappearing gun pit with steel shield from the 'old' disappearing gun set into concrete; this area is used as a shell store.

1913 - Outbreak of a fire at Fort Scratchley.

1912-13 - Construction of Fort Wallace near Stockton armed with two 6 inch MK VII guns.

1914 - Signal Station permanently moved to Nobbys Head; a new Battery Observation Post (BOP) built behind the new guns to house a range-finder and command centre.

1914-18 - First World War.

c1929 - The 39 Fortress Company is based at Fort Scratchley from c1929.

1937 - Removal of two remaining disappearing guns from Fort Scratchley.

1939-40 - Fort Scratchley fortifications enlarged in c1939; Fort Wallace is armed with long range guns.

1939-1945 - Outbreak of the Second World War in 1939. During the war, all of Newcastle's defences are controlled from an observation post at Shepherds Hill (Park Battery Observation Post).

1940s – The Rations Block is erected between the western guard house and bathrooms; a searchlight directing station is added to the south-eastern corner to control the three searchlights for Fort Scratchley.

1942 - Return of enemy fire from a Japanese submarine on the evening of 7 June 1942. The first intake of female officers and other ranks from the Australian Women's Army Service (AWAS) is accepted in October 1942. Newcastle's close defence system is upgraded.

1945 - Italian POWs are accommodated at Fort Scratchley for up to two years from 1945.

1948 – 1954 a CMF regiment, the 15<sup>th</sup> Northern River Lancers is located at the Fort. In 1952 three lives are tragically lost in an amphibious tank exercise off Stockton Beach.

1954 - Fort Scratchley is used by National Service Scheme for militia training; it is known as the 13th Medium Coast Battery RAA.

c1962 – Fort Scratchley becomes the base of a light anti-aircraft battery armed with 40mm Bofors guns; it is renamed 113 Light Anti-Aircraft Battery RAA.

1965 – The remaining 6 inch Mk VII guns are fired for the last time in night target practice in March 1962; these guns are relocated to King Edwards Park / Obelisk Park in c1965, although they are returned to Fort Scratchley in 1978.

1972 – The Australian Army vacates Fort Scratchley; the 113 Light Anti-Aircraft Battery RAA relocated to Adamstown.

1974 – Restoration works begin and continues for the next ten years.

1977 - Newcastle City Council given control of Fort Scratchley site; Newcastle Maritime Museum Society become the new tenants.

1978 - Fort Scratchley is placed on the Register of the National Estate; the 6 inch Mk VII guns are returned to the fort.

1981 – Exhibition of Fort Scratchley memorabilia during Heritage Week attracts many visitors to the site, and lays the foundation for the formation of the Fort Scratchley Historical Society.

1982 – Centennial celebrations at Fort Scratchley on 3 April. The Fort Scratchley Military Museum, located in the newly restored Commandant's Cottage, is officially opened to the public.

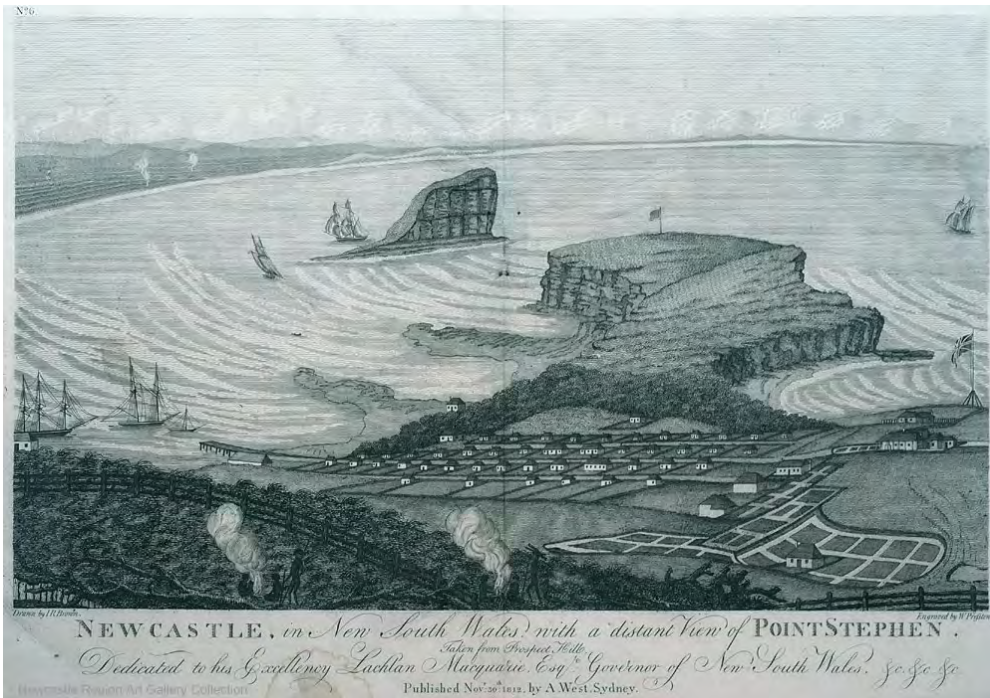
1993 - Preparation of a Conservation Management Plan for Fort Scratchley by Godden Mackay.

1998 – Formation of Fort Scratchley Historical Society Incorporated.

2000 - Restoration of c1850s 80 pounder RML gun, fired in 2001 to mark Australia's Centenary of Federation.

2004 - Fort Scratchley is closed for restoration.

### 3.2 PICTORIAL HISTORY



**Figure 3.1.** This view of Newcastle in c1812 shows Signal Hill, cleared of vegetation for navigation purposes. Signal Hill was a useful site for navigation because it was elevated; the only structure on Signal Hill at this time was the flagstaff. Note also that the site is separated from the town – there are no roads leading to or from it (T. R. Browne, Newcastle, in New South Wales, with a distant view of Point Stephen, 1812, Newcastle Region Art Gallery: <http://www.newcastle.edu.au/service/archives/chrp/earlynewcastle/browne1.html>; also attributed to Walter Preston, see National Library of Australia: [nla.pic-an7975519](http://nla.pic-an7975519))



**Figure 3.2.** This view of Newcastle in c1820 shows the flagstaff and another structure on Signal Hill, possibly the coal beacon (Sophia Campbell, Newcastle showing Nobby Head, c1820, National Library of Australia: <http://nla.gov.au/nla.pic-an4564433>)





**Figure 3.3.** This view of Newcastle in 1820 shows the flagstaff on Signal Head, and the path leading to it (Newcastle 1820 Mitchell Library, DGSV1B10 Digital Order No. a928877).



**Figure 3.4.** Signal Hill is in the distance; note the road leading to the site the red flag hoisted on the flagstaff and the small (stone?) tower (Walter Preston, Newcastle, Hunter's River, New South Wales. 1820, Newcastle Region Art Gallery: <http://www.newcastle.edu.au/service/archives/chrp/earlynewcastle/prestondet.html>)





National Library of Australia

nla.pic-an6239008-1-v

**Figure 3.5.** This view of Newcastle in 1823 shows the pagoda structure on Signal Hill, and Nobbys Island to the right, with work underway on the pier to connect it to the mainland (Robert Charles Harry, *The entrance to the harbour at Newcastle*, c1823, National Library of Australia: <http://nla.gov.au/nla.pic-an6239008>)



**Figure 3.6** Plan of Newcastle in 1828, showing a fort and a flagstaff at Signal Hill (Joseph Cross, *Map of the River Hunter and its branches*, 1828, National Library of Australia: <http://nla.gov.au/nla.map-nk646>)

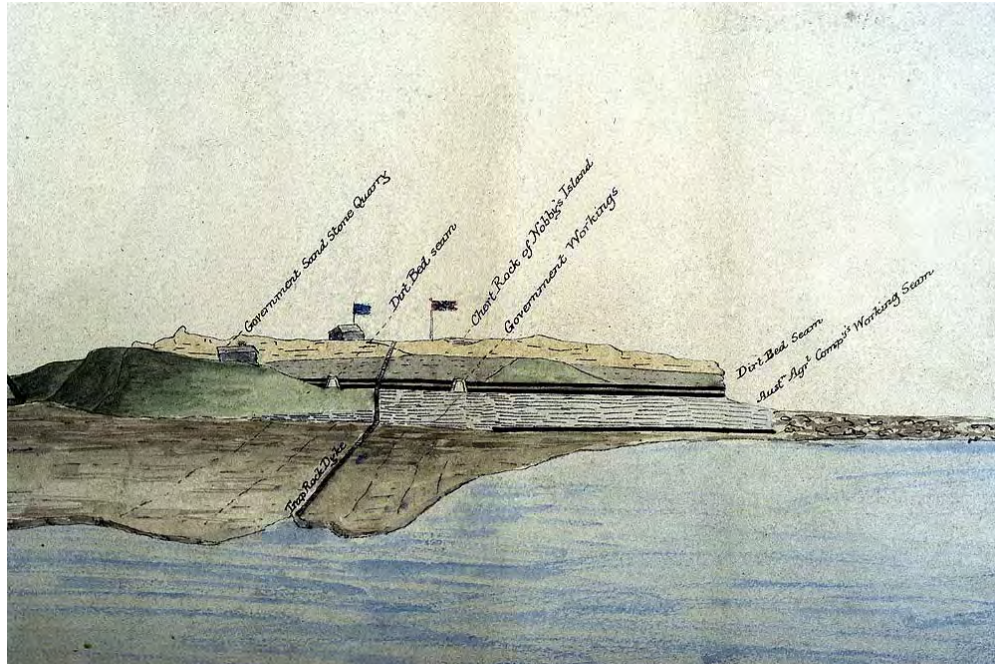


**Figure 3.5.** Detail of a plan of Newcastle in 1844, showing 'Look out House, Flag Staff and Light' at Signal Hill (The town of Newcastle and its harbour in 1844, National Library Map 72: <http://nla.gov.au/nla.map-f72>)



**Figure 3.6.** This view of Newcastle in the 1840s shows the pagoda house on Signal Hill at the far right of image and the adjacent 'telegraph' (aka the flagstaff or signal); in the far left corner of the image is inscribed: 'pile of coals used as a lighthouse' (Robert Marsh Westmacott, Newcastle, the coal mines of Newcastle, c1840-46, National Library of Australia: <http://nla.gov.au/nla.pic-an3724031>)





**Figure 3.7.** Cross-section of Signal Hill in 1854 showing mine workings (William Keene, Copy of Stratigraphic sketch from Nobbys Island Newcastle to Burwood, showing coal seams and their Order of Superposition, Flag Staff Hill Detail, 31 May 1854, State Records SZ325 N.1.1553)



**Figure 3.8.** Newcastle in 1855, Merewether Beach is in the foreground; Signal Hill with flagstaff / signal station and pagoda is in the mid distance (Colonial sketches: an album of views of Sydney and N.S.W. by E. West, F. Terry, C. Martens and others, Figure 19b. 1855, Mitchell Library DL PXX 30, Digital Order No. a1572042)



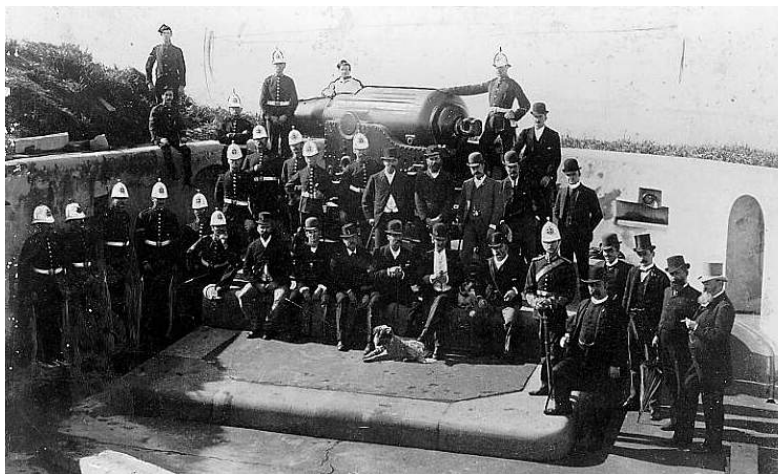
**Figure 3.9.** No. 3 Battery Volunteer Artillery, circa 1890's (ID 16301025, Newcastle Cultural Collections, Hunter Photo Bank)



**Figure 3.10.** Volunteer Artillery at Fort Scratchley, no date (ID 10200020, Newcastle Cultural Collections, Hunter Photo Bank)



**Figure 3.11.** Officers with an 80 pounder cannon at Fort Scratchley c1903 (ID 16300549, Newcastle Cultural Collections, Hunter Photo Bank)



**Figure 3.12.** Group at Fort Scratchley, Empire Day 1890 (ID 16300087, Newcastle Cultural Collections, Hunter Photo Bank)





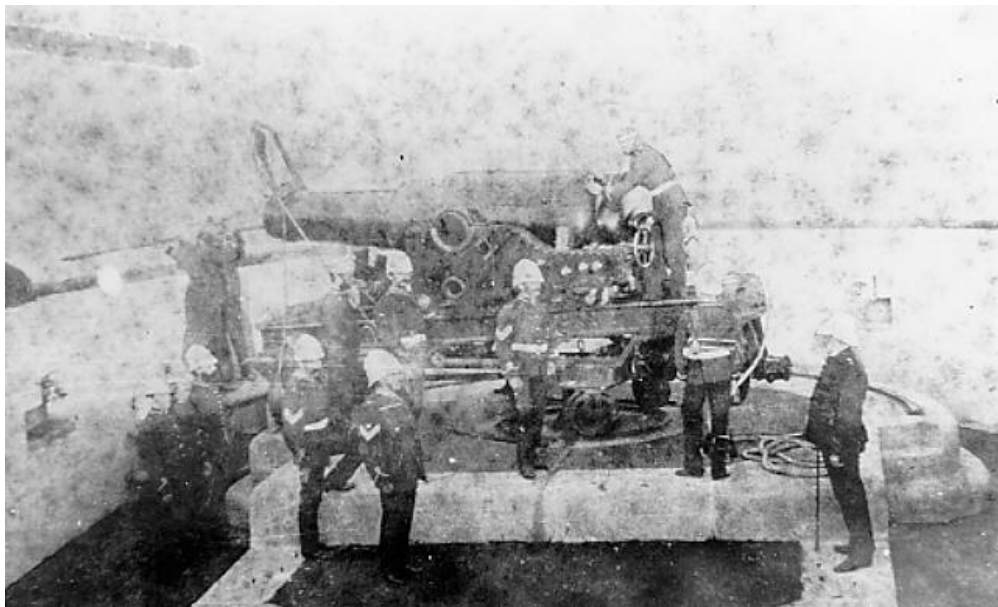
**Figure 3.13.** This view of Fort Scratchley in c1885, taken from the pier to Nobbys Head, shows the imposing concrete walls of the fortification, the casemates and the extant signal station (H B Ballard, Newcastle c1885, State Library of NSW, At World and Play BCP 05281)



**Figure 3.14.** Bare Island Fort at La Perouse was built at the same time as Fort Scratchley, and was designed and executed by the same team of Jervois, Scratchley, Morrell and Barnet; similarly to Fort Scratchley, Bare Island Fort was an enclosed fortification constructed with massed concrete (Bare Island, La Perouse, c1900-10, State Library of NSW, PXE 711/177)



**Figure 3.15.** Newcastle facing east from Fort Scratchley, 1885 (National Archives of Australia Box 603, C4076, HN173, also ID 05600329, Newcastle Cultural Collections, Hunter Photo Bank)

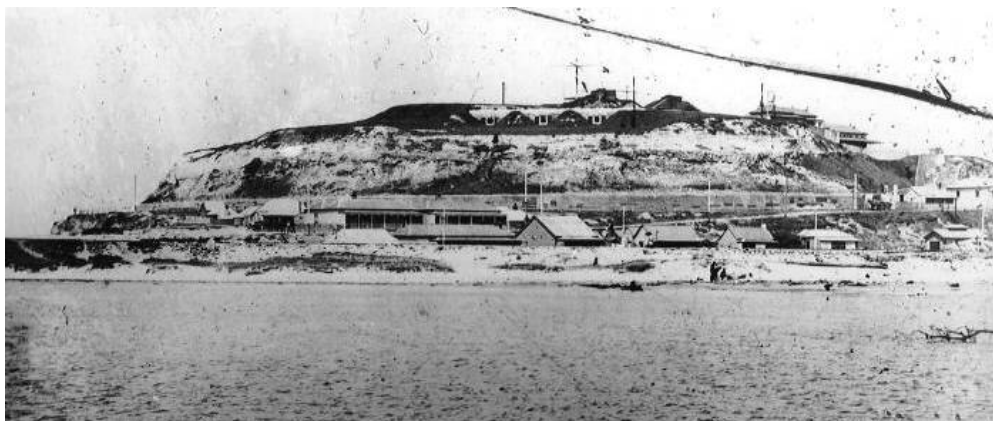


**Figure 3.16.** Firing of gun at Fort Scratchley, circa 1885 (ID 16301665, Newcastle Cultural Collections, Hunter Photo Bank)

Fort Scratchley Historic Site , Newcastle  
– Heritage Management Plan



**Figure 3.17.** Detail from an 1887 harbourmasters plan of Newcastle showing Fort Scratchley, with the positions of the guns and their lateral range; a well-defined road leads to the site (Capt FW Sidney, RN, Plan of the Port of Newcastle, 1887, MAP RM 1588: <http://nla.gov.au/nla.map-rm1588>)



**Figure 3.18.** Fort Scratchley in 1900 (ID 05600339, Newcastle Cultural Collections, Hunter Photo Bank)





**Figure 3.19.** This detail from a c1880s-90s plan of Newcastle shows Fort Scratchley, with the officer's quarters and barracks, a semaphore, a telegraph & signal station and a flagstaff. The site is named Signal Hill. The 'ditch' or moat clearly demarcates the fortifications from the rest of the town (Great Britain Hydrographic Department, Newcastle Harbour 1881-1891. MAP RM 2989: <http://nla.gov.au/nla.map-rm2989>)



**Figure 3.20.** Army Camp at Fort Scratchley, nd (ID 16300157, Newcastle Cultural Collections, Hunter Photo Bank)





**Figure 3.21.** View of Fort Scratchley at the turn of the twentieth century, with the pier to Nobbys Head in the foreground, and the city of Newcastle to the right (Newcastle 1900-1910, Mitchell Library, PXE711477)



**Figure 3.22.** No 5 Battery, Fort Scratchley c1902 (ID 16300953, Newcastle Cultural Collections, Hunter Photo Bank)

Fort Scratchley Historic Site , Newcastle  
– Heritage Management Plan



**Figure 3.23.** Servicemen outside the Barracks at Fort Scratchley, no date (Group of servicemen at Fort Scratchley Newcastle, nd, University of Newcastle Cultural Collection, A5831)



**Figure 3.24.** Group portrait of Fortress Company officers at Fort Scratchley in 1939 (Australian War Memorial P02475.003)



**Figure 3.25.** Gun emplacement at Fort Scratchley, circa 1980 (ID 04500100, Newcastle Cultural Collections, Hunter Photo Bank)



**Figure 3.26.** Gun emplacement at Fort Scratchley, circa 1980 (ID 04500098, Newcastle Cultural Collections, Hunter Photo Bank)



**Figure 3.27.** Artillery practice at Fort Scratchley in 1953 ('Gunfire at fort', 14 May 1953, State Library of NSW, Home and Away – 27033, NCY53/511)



**Figure 3.28.** Fort's guns in action, 1955 (State Library of NSW, Home and Away – 27902)



Fort Scratchley Historic Site , Newcastle  
 – Heritage Management Plan



Figure 3.31. The former Ambulance station near the driveway entrance. Master Gunners Cottage at rear, circa 1965

(Austral Archaeology Pty Ltd)



Figure 3.292. Entrance to the Fort prior to 1970, from left: amenities buildings, drill hall, master gunners cottage and Ambulance Station

(Austral Archaeology Pty Ltd)

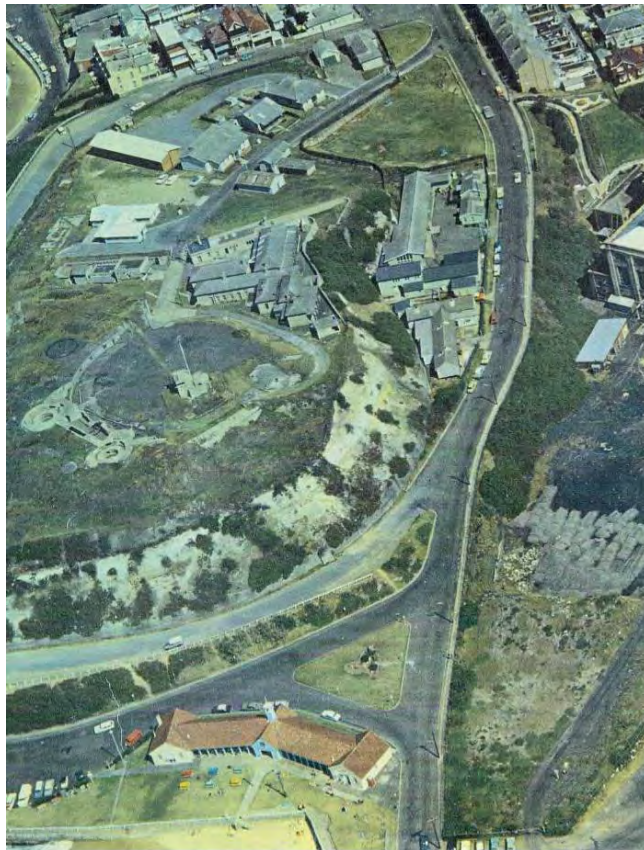


Figure 3.303. Completed restoration of Master Gunners Cottage, used as Newcastle Out-of-Workers 1982

(B Dawbin)

Figure 3.34. Aerial view of Fort, ca 1969

(Austral Archaeology Pty Ltd)

### 3.3 CONSERVATION : 1978 – 1985



Figure 3.35 Panoramic view of the Battery during erection of the flagstaff, 1982



Figure 3.36

Commandants cottage before and after restoration in 1978

(photos: B Dawbin)



Figure 3.37.  
Opening Address by Major General Whitelaw



Figure 3.38.  
Former serving personnel of Fort Scratchley  
Including:  
Rear: Major Wal Watson (Battery Commander at the Fort on the night of the Japanese attack on 8 June 1942)  
Ern Boulton, Lt Col Dick Wearne  
Front: Melissa Cameron and AWAS colleagues, Stan Newton snr and jnr, Col John Howard O.B.E. E.D. (President of the Newcastle Sub-Branch of the Artillery Association [NSW] Inc.) Lt Col Dick Mort



Figure 3.39.  
Address by Museum President  
Ern Boulton.  
Lord Mayor Ald Joy Cummings (seated, centre)  
  
(photos: B Dawbin)



### Opening ceremony 3 April 1982



Figure 3.40. Barbettes after installation of Mk 7 gun pedestals



Figure 3.41. Completed restoration, 1984, including replica gates, sentry box and flagstaff

(photos: B Dawbin)



Figure 3.42. Replica flagstaff, on completion 1982



Figure 3.43. Erection of flagstaff 1982



Figure 3.44. First flag raising by former Sergeant Stan  
Newton and Gunner Bill Rolfe, 1982

## Flagstaff

## **PART 4: UNDERSTANDING THE SITE - PHYSICAL EVIDENCE**

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### **4.1 PHYSICAL DESCRIPTION OF SITE FABRIC**

#### **Introduction**

The principle purpose of these descriptions is to understand and evaluate the cultural significance of the Fort Scratchley site. To this end it is inevitable that historical factors will intermesh with the description of the physical fabric. Accordingly the information presented here, while generally concentrating on the present state of the components, will also discuss the distinct periods in the development of the fort and the more important physical factors which have affected the fabric.

This section endeavours to present a broad evolution of the effect of the historical context on the physical fabric of the fortress and its infrastructure.

#### **Phases of development**

The major periods identified in the development of the fort are :

##### **The Construction of Fort Scratchley:**

- the construction of the Battery 1878 - 82.
- the construction of the Commandant's Quarters, the Barracks and the water storage system.

##### **1889-1892 Modifications:**

- the construction of the Harbour Mines Command Post and modifications for the installation of the disappearing guns.

##### **1910-1911 Modification of the eastern area of the Fort:**

- the disappearing guns were replaced and an observation post and signal tower constructed.

##### **1939-1945 Expansion:**

- new guard house constructed, the old guard house converted into a communications centre
- the old guard house was extended, searchlights, SL directing post added.

##### **1974-1976 Reconstruction**

- preliminary phase, - increased security
- temporary reconstruction works, the barracks and battery



**1978-1985 Conservation and reconstruction**

- The Commandants Quarters reconstructed.
- Reconstruction of gates, flagstaff
- Structural remediation of tunnels and Battery Observation Post
- General upgrade of site
- Commandant's Quarters roof, joinery and verandahs reconstructed.
- Cast iron verandah columns reinstated.
- Dry ditch bridge gates and lights reinstated.
- Flagstaff reinstated
- Stairs and repairs to BOP
- Some remediation in the tunnels.

**2005- 2008 Refurbishment**

- New Site services (power, water, sewer, fire services and communications)
- Major refurbishment, some waterproofing of tunnels and upgrading of tunnel lighting, power and comms.
- Conservation works to Commandants Cottage Barracks Buildings and inner fort structures.
- Refurbishment of Master Gunner's Cottage, new linings, electrical upgrade, wall removed.
- Construction of Multi-purpose Centre Building and replacement for former transport garage building.
- New Pathways, handrails and upgrading of site for public access and amenity.
- New perimeter ordinance fence, new driveway gates.
- Reinforcement of the ramparts and construction of earth beams.
- Remedial work to remove or cap contaminated soils.

**Refer to Existing Conditions 2008, *Section 4.9***

**The following Plans outline the development of the Fort battery complex and building development on the site from 1892 to the present day**

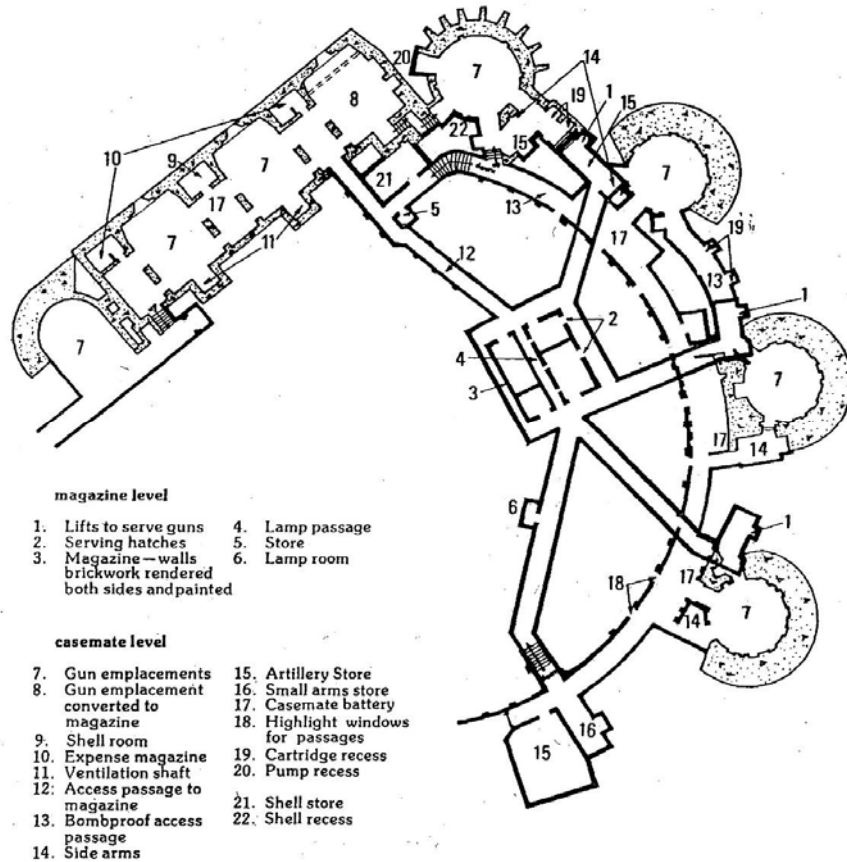
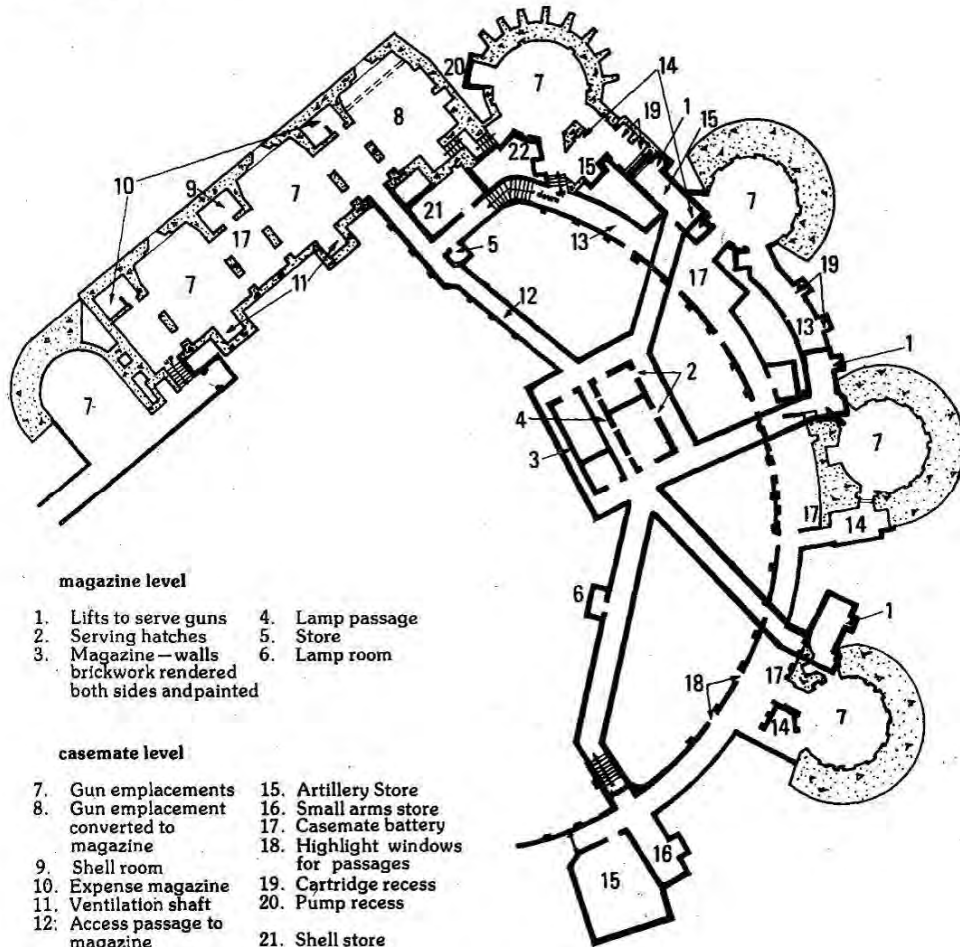


Figure 4.1. **Battery Complex 1892**

## fort complex (1911)



**magazine level**

- |   |                 |
|---|-----------------|
| 1. Lifts to serve guns  | 4. Lamp passage |
| 2. Serving hatches  | 5. Store        |
| 3. Magazine – walls<br>brickwork rendered<br>both sides and painted | 6. Lamp room    |

**casemate level**

- |  |                                       |
|--|---------------------------------------|
| 7. Gun emplacements                            | 15. Artillery Store                   |
| 8. Gun emplacement<br>converted to<br>magazine | 16. Small arms store                  |
| 9. Shell room                                  | 17. Casemate battery                  |
| 10. Expense magazine                           | 18. Highlight windows<br>for passages |
| 11. Ventilation shaft                          | 19. Cartridge recess                  |
| 12. Access passage to<br>magazine              | 20. Pump recess                       |
| 13. Bombproof access<br>passage                | 21. Shell store                       |
| 14. Side arms                                  | 22. Shell recess                      |

*By courtesy of R.S.Mort.*

Figure 4.2. Battery Complex 1911

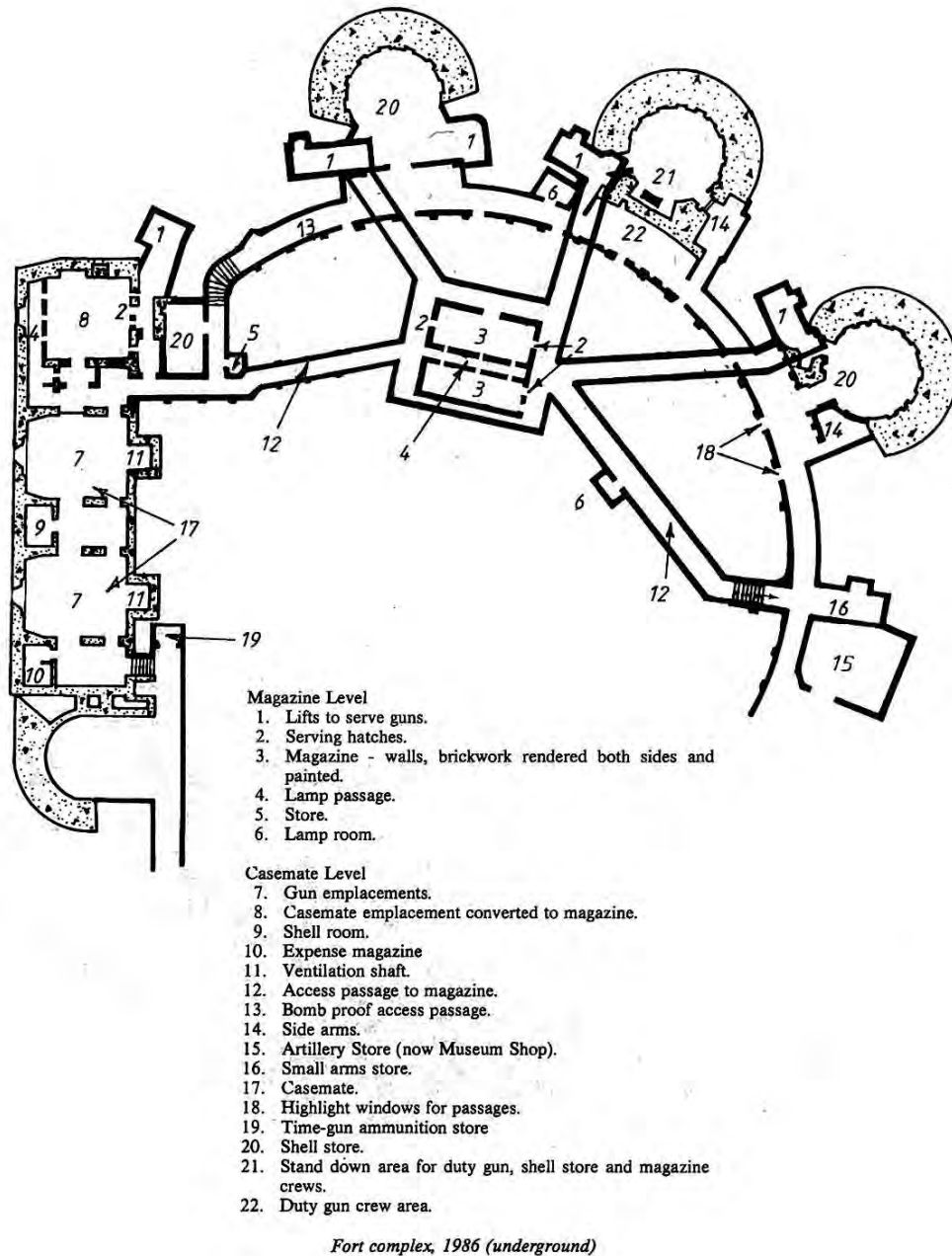


Figure 4.3. Battery Complex 1986

Fort Scratchley Historic Site , Newcastle  
 – Heritage Management Plan

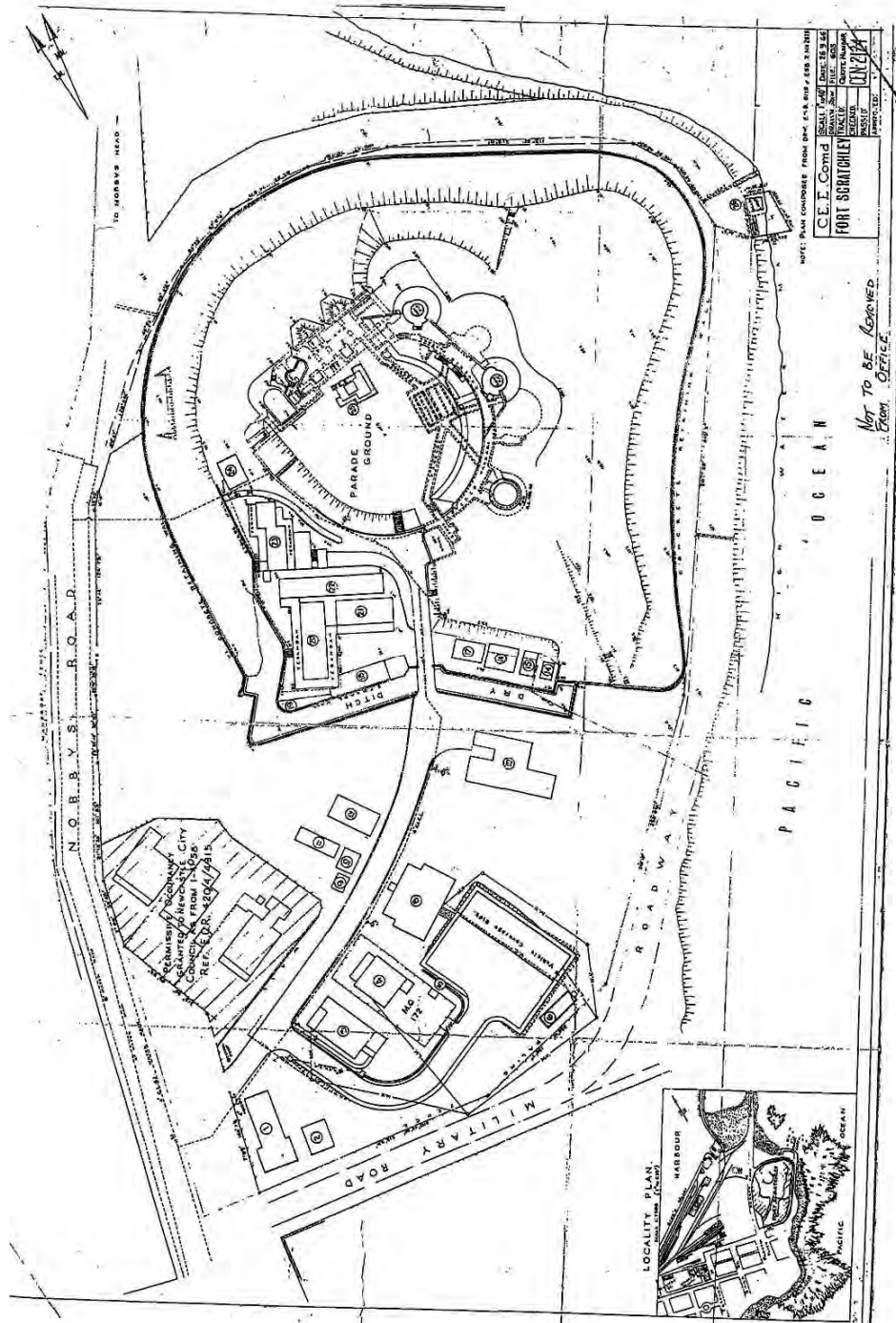


Figure 4.4. Fort, site and buildings 1966

The following diagram shows the site in recent times.  
 By courtesy of R.S.Mort.

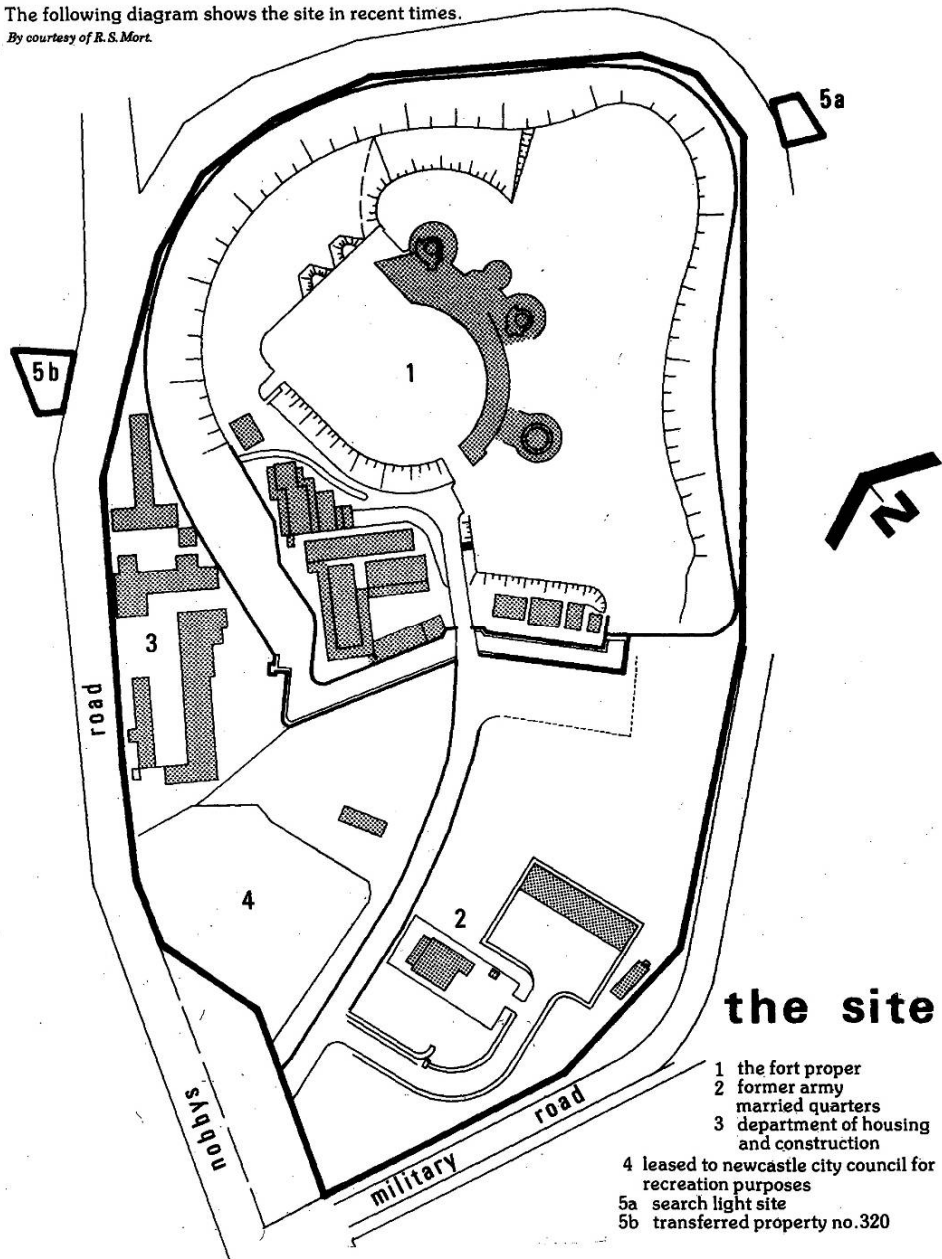


Figure 4.5. Fort, site and buildings 1977

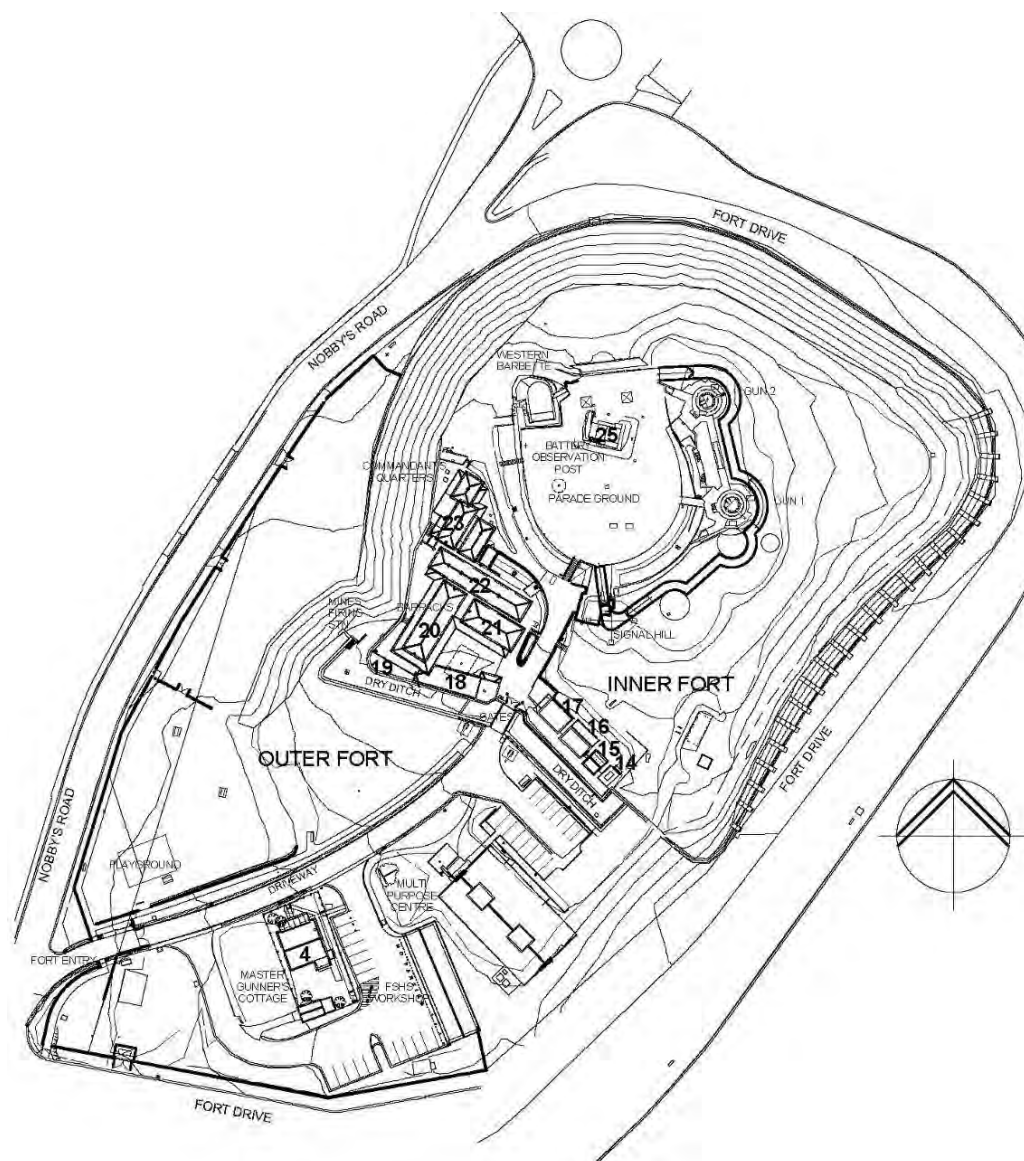


Figure 4.6. Fort, site and buildings 2008

## 4.2 LAYOUT OF BUILDINGS

The complex of buildings and structures presently on the site consists of sub-groups of structures which are arranged in descending order around the hill as follows:

- the gun emplacements, Battery Observation Post and associated fortress structures and underground tunnels.
- the Commandant's Cottage
- the Barracks and associated buildings on the lower apron of the inner fort
- the former Transport Garage now new Workshop.
- the Master Gunner's Cottage

A publicly accessible playground exists adjacent to Nobbys Road, near the driveway entry.

The C.E.E. Command drawing (26.09.66) for Fort Scratchley utilises a building numbering system starting at No.1 for the building at the corner of Fort Drive (military Road) and Nobbys Road through to building No. 26. Many of these buildings have been demolished. (refer to Fig 4.4).

For the 2005-2008 Works a numbering system was derived to describe precincts, buildings rooms within buildings and to identify site structures. This numbering system is also referred to here and will be useful to future maintenance scheduling. Under the Military numbering system buildings 1; 2; 3; 5; "Vehicle Coverage Building" 7; 8; 9; 10; 11; 12; 13; 24; and 26 have been demolished. The three buildings fronting west to Nobby's Road and the group building known as the 'SES' Buildings under the Fort on Nobby's Road have also been removed.

## 4.3 TOPOGRAPHY

The site is a hill some thirty metres above sea level on the southern side of the mouth of the Hunter river. The original shape of the hill has been substantially altered over time. The hill was first noticed because of the visible coal seams on its eastern face, which attracted coastal shipping whose crews initially collected the surface coal. The hill was subsequently mined, and the tunnels were filled in the early 1880s during the construction of the fort designed by Scratchley and Jervois. The first fortification constructed on the hill consisted of earthen mounds built by convict labour in the 1820s. The construction of a more sophisticated fortress on the summit of the hill in the 1870s and subsequent upgrading of the installation has resulted in a continual reshaping of the surface of the hill. The basic arrangement of the complex set by the Scratchley/Jervois 1878 design has remained constant.

The Scratchley/Jervois design utilized the summit of the hill as the location of the gun emplacements which overlooked the river mouth, the main arcs of fire being to the east and north. For a number of years, the summit of the hill was occupied by both military and navigational structures. The existing relatively steep geographic formation of the hill sides to the north and east were reinforced, and steepened where necessary. The hill falls away more gradually to the south and the area close to the summit was terraced to provide parade grounds and space for buildings. The Commandant's Cottage, constructed between 1885-86 was located west of the summit on the highest terrace. The lower terrace was utilised for the barracks buildings and any ancillary structures, which were part of the same construction works. The whole of this south-western area of the inner fort was enclosed by a wall and dry ditch. The only entrance to the inner fort was to the south via a bridge across the dry ditch.



The area outside the inner fort walls on the south westerly slopes has been utilised for a variety of more temporary structures since the 1885-6 works, but most structures have been associated with the military occupation of the fort. Prior to those works a row of pilots' houses encircled the west side of the slopes. These residences were used as married quarters by the early Twentieth Century.

Until recently the driveway leading from the west corner of the site was also the pedestrian path. This continues through the fort wall gates and swings around the North West side up to the Parade Ground.

#### **4.4 THE BATTERY EMPLACEMENT 1878-82**

Work on the permanent fortifications began in 1878/79. Work stagnated but was revived in the early 1880s, fuelled by new rumours of a Russian attack. Most of the existing buildings associated with the pilot station were demolished at this stage (1881-82). The guns and their associated works were the primary focus of the construction, and the barracks were to be part of a later contract.

The permanent gun emplacements were laid out in a semi circle to the east which linked four circular gun pits, and a casemate. The casemate which is an enclosed emplacement, consisted of three chambers with one open gun pit on the west end. It was laid out in a straight line, looking north. A magazine was constructed on a lower level in the central area behind the eastern arc of gun pits. A series of radiating tunnels from the magazine gave ready access to artillery stores located between each of the pits and to the casemate. Shell hoists connected the artillery stores to the gun pit level. The whole installation was excavated into the hill top. The gun pits in the east arc were termed 'en barbette', which is a description used for open pits surrounded by low walls. The whole installation was constructed of reinforced concrete and rendered brickwork. The technology involved was not uncommon at the time although the development of reinforced concrete was still at an early stage. The reinforcement tended to be in the form of beams like railway track embedded in the mass concrete or used as permanent formwork.

The dry ditch, which was some one hundred and fifty feet long and seven feet deep, forming a semi-circle enclosing the southern side of the fort, is also thought to have been constructed at this early stage. The dry ditch was intended to be a barrier to attack from the landward approaches. The wall which was later incorporated in the inner edge of the ditch was part of the later works.

##### **The Inner Fort**

The inner fort is defined by the dry ditch, the bridge and gates. It encompasses the Battery, Observation Post, accommodation and utilities buildings. The flagstaff is the highest point on grade within the inner fort.

#### **4.5 THE BARRACKS COMPLEX OF BUILDINGS 1885-86**

##### **General**

Plans for a barracks for the artillery men altered over time, a stockade and barracks constructed from timber were proposed by Scratchley in 1882 (p14 Vol II Wilson and Davies 1979) but the barracks finally constructed in 1885-6 were of rendered brick work and to a substantially enlarged plan.

The barrack buildings were let to tender in April 1885. The tender was won by Mr George A Smith and the barracks were completed in twelve months with the final details overseen in the last two months by Regimental officers, Lieutenant Kyngdon and Warrant Officer Webster, from the Colonial Architects Office.

The barracks complex as constructed was designed by G A Morell from the Colonial Architects Office, who specialised in military works and overseen by James Barnett, who is known to have consistently refused to delegate authority for the approval of work during his twenty eight years as the Colonial Architect (1862-1890). Barnett's refusal to delegate authority ensured a consistent output which revolved around Classic styles. Those based on the roman, florentine and venetian schools were particularly favoured for public buildings.

The inner fort buildings were typical structures of the period, having cement rendered solid brick walls, and timber framed windows and doors and wood floors, the timber framed hipped roofs were clad in corrugated iron. The barracks were constructed in the Victorian Regency style, which was characterised by a simple rectilinear arrangement of structures with shallow pitched roofs and restrained classical mouldings. The verandah and "crisp lines and classical proportions in the treatment of doors and windows" (*Identifying Australian Architecture* p46 Apperly Irving and Reynolds 1989) were recurring features of the style.

The enclosing outer wall encircles the built-up part of the fort restricting the space between and around the buildings and several buildings incorporated the wall in their structure. The complex consisted of a three bedroom Commandants' cottage on the upper terrace and an L shaped barracks which consisted of three separate wings linked by verandahs on the lower terrace. A guard house was located west of the gate and a laboratory and ablutions block to the east of the gate. The NCO's ablutions block was an awkwardly shaped area constructed within the south-west corner of the enclosing wall.

### **The Barracks Buildings (20, 21, 22) Code 1230, 1240, 1250**

The Barracks complex as constructed was larger than envisaged by Scratchley, and consisted of an L shaped arrangement of rooms on the northern and western sides of a small parade ground (courtyard), with a second rectangular building separated by an open air passage parallel to the northern side of the L. The complex basically consisted of three hipped roofed pavilions interconnected by verandahs or narrow passages, formed in the narrow spaces between the buildings. The parade ground and westerly faces of the buildings were surrounded by an 8 foot wide, sandstone flagged (now concrete), roofed verandah. A separate ablutions block was incorporated in the fabric of the external wall between the guard house and the NCO's ablutions.

The arrangement of the barracks complex is of significance chiefly because of the way the enclosed space of the Fort was accommodated in the design and secondly because of the requirement for self sufficiency in the event of a siege.

The confined space available for the barracks was utilized without detracting from the low scale and balanced proportions of the composition when viewed from the entrance gate or from a distance. The relationship between the various barrack roofs contributes to the interesting roofscape which is visible from outside the Fort and from the upper Parade Ground. The verandah roofs are attached around a metre below the projecting edges of the hipped roofs.

The planning layout and physical connections between the buildings is however somewhat primitive with little internal circulation. It emphasized the hardy nature which troops were expected to adopt.

The other major challenge in the construction of the barracks complex was in the provision of sufficient water for the whole of the Fort's requirements. Five underground tanks were designated to supply the Fort's needs. The largest was a 42,000 gallon capacity tank which was located in the yard in front of the barracks.

The tanks were all supplied by stormwater run-off and a complex arrangement of recycling. The run-off from the roofs was channelled along the roof guttering and via the hollow cast iron columns which acted as the down-pipes, to the underground drainage system which fed the tanks. Although this device for dealing with roof run-off was introduced in the early 1800s relatively flat trellis-like verandah columns are normally associated with the Victorian Regency style. It was obviously expedient to replace the stylistic norm with a functional alternative in the circumstances.

Temporary timber columns to the verandahs were installed during the early 1970's and the roof drainage system was disconnected. The timber posts were replaced by cast iron replicas in 1983 from modified moulds (slightly shorter) from the Commandant's Cottage reconstruction. The hollow round cast-iron columns are tapered in profile with bases and heads formed by concentric rings. The courtyard tank is now filled with sand

### **The Barracks Interiors**

The interior of the barracks suffered considerable vandalism and was substantially refurbished during the 1977 reconstruction works. Any evidence of previous phases in the use of the buildings appears to have been eradicated in this process. There are very few extant non-standard features, and there is little remaining evidence of the troops' occupation of the buildings of almost a century. The present building arrangement and finishes reflect the original construction, but do not indicate the use of the barracks over time.

The floors throughout are tallowwood boards butted together, except in the utility rooms, like the kitchen and wash house, which have concrete floors. Floor coverings during the Maritime Museum era were vinyl tiles, probably inherited from the military period. This is consistent with original finishes which were typically linoleum in barracks facilities of the period. The skirtings are timber either 100 x 75mm on the flat or 130mm high. The walls are hard set cement render. The clerestory windows are visible on the inside of the rooms with tapering reveals. The cornices are bead edged timber boards with mitred corners. The cornices encircle the room just beneath the corrugated iron ceilings which are a standard feature throughout the barrack complex. The ceilings commonly have a small framed opening with an inset timber vent and roof access panel which consists of lining boards with a number of drilled holes in a circular, or star pattern. The fireplaces are a standard opening with high stone mantelpieces with an ogee curved base. There is very little internal circulation between the rooms and most are accessed from open air passages between buildings, or through external doors sheltered by verandahs.

### **The Barracks Exterior**

The three pavilions are simple hipped roofed, cement rendered masonry buildings. Verandahs are located below the clerestory windows, now glazed, around the sides of the buildings which face the parade ground (courtyard), and on the southern and western sides of the western pavilion.

The simulated ashlar, rendered external walls have very little ornament except for the projecting sandstone sills above the verandah roofs. The clerestory windows, above each room window had been sheeted over, inside and out. The cast-iron verandah columns are the only other decorative feature on the barracks. The chimneys are all in the same style.

They are relatively short and located on the ridges. The crowns are made up of a simple arrangement of rendered rows of corbelled bricks.

The evenly spaced windows are generally double hung pairs of sashes of six panes each. The original sills were projecting sandstone pieces with up-turned edges on either side of the window frames. The clerestory windows also have matching sandstone sills. A number of the sills have been repaired as the combination of soft local sandstone and harsh coastal environment has taken its toll. The sills in the less public and more confined areas are flush with the walls. The doors are generally four panelled with recessed mouldings on the inner panels. The outside door panels vary, some having mouldings and some flush or recessed. Some doors to utilitarian rooms are framed ledged and boarded doors. All the barracks buildings feature a shallow plinth at the base of perimeter walls and at the roof framing springing level above.

The verandahs are corrugated iron on timber framing. The verandah roof is not lined. The eaves have a simple beaded panel attached. The verandah floors are concrete. It is not known if this is a shallow topping over the original sandstone flagstones or a replacement.

#### **The Kitchen Block, Northerly Barrack (Building 22) Code 1260**

The northerly barrack block is only linked into the verandah system on its southwest corner. It is a long, narrow, hipped-roofed pavilion adjacent to the retaining wall for the upper level driveway. It consists of a series of rooms arranged in an east-west line. The rooms in this block are generally recognised by the military as requiring separation from the 'other ranks' facilities for reasons of either status or utility. It contains from west to east: two non Commissioned Officers rooms, an office or additional barrack room, a store, a wash house and a kitchen with an adjoining pantry and store then a smaller corner office. Rooms are accessed from the narrow open passage between the other barracks buildings on the south elevation. The utility rooms also have rear doors which give access to the narrow path at the rear of the block formed by the proximity of the block to the retaining wall of the upper terrace. Front and rear double hung windows have six panes in each sash. The store room in the centre has only one standard six pane double hung window in the north wall. The NCO's room on the west end is lit by a further pair of windows on the west elevation. The pair of windows in the east elevation are smaller, four and six pane double hung sashes to the store and pantry respectively.

#### **The Recreation Room and Canteen Block, Southern Barrack (Building 21) Code 1240**

This block forms the northern edge of the parade ground (courtyard). It is a smaller hipped roof pavilion, with a verandah along its southern edge. This block although wider than the rear block also has limited internal circulation. From west to east it consists of a large recreation room, a canteen, and a Gunner's and NCO's room which share the east end elevation.

The Gunner's room was formerly connected by an internal door to the Canteen. This door has been replaced by a serving hatch probably during the later period of occupation of the Fort. The Gunners' room is lit by a typical double hung window with six paned top and bottom sashes in the east wall. It has a timber floor, rendered walls and a corrugated iron ceiling. A serving opening extends along the full length of the west wall. The NCOs' room is very similar to the Gunners' room in materials and arrangement. It has a serving hatch in its west wall but has no other built-in furniture or fittings.

The canteen has been substantially altered over time, and had a sink beneath the serving hatch in its southeast wall, adjacent to the former location of a doorway. The hatch into the NCOs' room was separated by a small central section of rendered brickwork from the southern hatch into the Gunners' room. The canteen was also originally connected by a hatch or door to the adjoining recreation room perhaps changed in the 1950's. The canteen

is entered from a doorway in the north wall and is lit by a single window in the typical style, in the south wall.

The recreation room is a large room lit by a pair of typical double hung, six-paned top and bottom sashes on each of its three external walls. It is accessible via a central door on both the north and south sides. It was heated by a typical barrack fireplace in the west end of the room. The high mantelpiece is stone with the standard ogee curved base.

### **The West Barrack Block (Building 20) Code 1230**

The west block is a hipped-roofed pavilion in the same style as the others and is similar in size to the southern block. A verandah extends around three sides of this building, and the verandah floor is substantially above ground level at the southwest corner, overlooking the NCO's ablutions infill building.

The internal plan of the building consists of two large barrack rooms on either side of a central corridor. Each of the barrack rooms has four standard windows to the east and west walls. The southern room has a further two windows to the south wall. A standard fireplace is also located at the end of each room. A pair of four panel doors with three panel fanlights over give access to the central corridor. The ceilings throughout are corrugated iron with the typical flat timber cornice. The skirtings are 100x75 block profile timber. The walls are cement set plaster rendered brick.

### **The Commandant's Cottage (Building 23 - 1885-86) Code 1310**

The Commandant's Cottage is a three bedroom bungalow, also in the Victorian Regency style. The living and utility functions of the cottage complex are separated by a central open covered way, all the utility rooms being on the east side, and all the living rooms aligned on the west side overlooking Newcastle and the river. The living rooms from north to south consist of two bedrooms, a sitting room, a central passage and a third bedroom on the southern edge of the upper terrace. The west wall features three pairs of French doors, the east wall, one pair.

The covered way terminates in a small pantry at the southern end of the building. The rear pavilion contains, from north to south, a wash house, a kitchen and a servant's bedroom. East of the rear utility wing, a flight of steps leads down to the lower level terrace. A large room described as a servant's closet is partially buried in the upper terrace adjacent to the steps, and was adapted as a bathroom during the 1978 reconstruction. Two closets containing a urinal in one and a toilet in the other are located at the bottom of the western steps.

The Commandant's accommodation is located to the north of a separating wall and is elevated above the Barracks.

The timber elements of this building were largely reconstructed in 1978 following many years of neglect. The corrugated asbestos cement roof had failed to protect the interior and vandalism had taken its toll. The roof, all window and door joinery, much of the timber floors and all ceilings were replaced (the floor boards subsequently shrunk). The surviving remnants of the 1902 verandah infills were removed and verandah framing and cast iron columns were reconstructed and reinstated.

There are a number of standard features throughout the Barracks and the servant's rooms in the Commandant's Cottage. Walls are rendered brickwork and the floors are tallowwood, butted boards, approximately 50% of which were replaced in 1978. The utility rooms have concrete floors. The windows are generally double hung pairs of sashes, with six glazed panes in each. The main doors are four panelled with three paned fanlights over. Braced &

ledged boarded doors are generally attached to utility rooms. The fireplaces were slate surrounds with cast iron inserts. The verandah columns are cast iron circular section columns with concentric rings at base and head.

### **Interior Description**

The fittings and fixtures in the west and east wings differed markedly in quality. The west wing has polished tallow wood floors, moulded skirtings, rendered walls, substantial cornices and plasterboard ceilings. The original ceiling to the living room was ornate pattern pressed metal with a complex bolection profile set plaster cornice. Bedrooms and dining room were plaster and lath. The reconstructed ceilings are plasterboard, installed in 1978, but the cornices were copied from remnants of the original profile and run in the traditional manner. The pressed metal fragments had almost entirely disintegrated through rust. The fireplaces in the bedrooms and dining room are a combination of slate surrounds and wood mantels utilising components of the originals. The fireplace was missing in the living room but fragments indicated this was white marble. A similar replacement was obtained from Sydney, with cast iron grate installed in 1983. There was no evidence of floor coverings at the time of the 1978 conservation, but were probably vinyl tiles consistent with the Barracks Buildings. It is likely that original floor coverings were linoleum.

The floors in the kitchen and servants bedroom are also timber and although the skirtings presently match those in the front rooms, it is likely that the original skirtings were less elaborate. The walls in both areas are rendered but the ceilings of the rear rooms are the reconstructed corrugated iron with a timber cornice, matching original. The fireplace in the kitchen was a substantial opening, intended to take a fuel stove and has no decorative surrounds apart from a stone mantelpiece, which was in the same style as those in the Barracks with an ogee curved base. The servant's bedroom does not have a fireplace at all. The wash house has a concrete floor and a rendered brick fireplace with recess for a copper, which was replaced in 1978.

The northern section of the enclosed verandah was a simple timber framed boarded enclosure with windows. Timber boards lined the ceiling, attached to the sloping rafters. The floor was butted boards on joists which were laid on the concrete verandah. The dilapidated enclosure was removed as part of the 1978 reconstruction works.

### **Commandant's Exterior Description**

A verandah runs along the whole of the west, or front elevation. The verandah floor is presently concrete, edged with stone blocks. It is likely that the original flooring was sandstone flagstones. The verandah is supported by simple cast iron circular section columns. The columns taper toward the top and are decorated by concentric rings at the base and head. The verandah roof is unlined corrugated iron on timber framing, the whole located around 800mm below the eaves line. The eaves line is itself of interest, because it consists of a particularly deep fascia board, above a relatively shallow eaves, giving the impression of a substantial beam at eaves level. The walls are brick with a rendered simulated ashlar finish. The windows are double hung generally two sashes of six panes, and the verandah can be entered through any of three sets of French doors or a four panel door at the end of the central passage. The French doors to the bedrooms are made up of a simple moulded bottom panel with three fixed panes arranged vertically above. External doors are four recessed panel type with protruding mouldings. All external and internal doors and all windows were reconstructed in 1978, based on the detail of remnant original joinery.

The original roofs are thought to have been corrugated iron, although they were replaced with corrugated asbestos cement sheeting, probably around the 1930s, when it became a popular building material. The corrugated asbestos was replaced by corrugated steel in the

1978 reconstruction. The chimneys are simple rendered brick structures located on the ridge line decorated by simple corbelled crowns.

#### **The NCO's Ablutions Block (Building 19) Code 1220**

An ablutions block was constructed inside the southwest corner at the dry ditch wall. The wall forms the rear wall of the block. The shallow skillion roofed building has an awkward floor plan which tapers to the east. From west to east the rooms are: the gunners' bathroom, the lavatories and then the NCOs' bathroom. No fittings or fixtures remain in these spaces.

#### **The Original Guard House 1891 (Building 18)**

The original guard house was the building immediately to the left (west) of the entrance gate. It has always utilised the dry ditch wall as its rear wall. It is basically square in plan, and originally consisted of a main room and a pair of adjoining cells on the west wall. A fireplace was located in the wall between the two cells and main room, to heat the main room. It is a brick building with rendered walls, which extend vertically to form a parapet. The parapet is decorated with a central moulded section on a shallow plinth. The flat roof is surmounted by a central chimney in standard style, which has been extended to create a much taller stack. The flat roof is protected by a membrane. The present awning on the north face of the building is a reconstruction in 1981 based on the original detail. It is a bellcast corrugated steel awning over timber framing with cast iron support brackets. The single windows in the north and east elevations are in the standard pattern but are protected by steel shutters. Several glassed loopholes overlook the dry ditch. The internal walls have been left unfinished, allowing the opportunity to interpret the layering of paint finishes and the evidence of many fittings and fixtures that were attached to the walls

An unusual feature of the Guardhouse is the sandstone paved forecourt to the front of the building, under the awning. All verandahs to other buildings in the Fort are concrete paved with granite edge coping stone.

A large main switchboard and meters installed in 1977 were removed and relocated in the adjacent store in 2008.

This guard house was converted into a communications centre and extended to the west to provide more ablution spaces in about 1940.

#### **The Laboratory (Building 16) 1886 Code 1131**

A laboratory in which the charges were made up and shells were packed, was located well away from most other buildings. It was located east of the gate in a narrow area cut into the hill. The laboratory was a reinforced concrete building with a flat roof and a concrete floor. It had two armour plated entrance doors on the southern side, located on either side of a raised pair of smaller centrally located doors which appear to have been designed to allow lamps to be tendered from outside and to allow daylight in through fixed glass. Each side door opens onto a corridor, which gives access to the central laboratory room via an entrance adjacent to the north (rear) wall. The central laboratory room is a single rectangular space which was probably surrounded by shelves. It is well vented. There is no visible evidence of original furniture or fittings. However, in the east passage there is a bench seat which appears to be associated with the early operation of the building. A small corrugated iron skillion roofed annex at the rear of the building, a later twentieth century addition has been demolished leaving a slab with perimeter hob.

### **Gunners' Ablutions (Building 15) Code 1121**

The small building east of the Laboratory housed the gunners' toilets. It contains two lavatories and a urinal on its southern side. The rear room has urinals along the northern side and wc pans separated by slate panels to the southern side. Porcelain pans complete with leather seat warmers and high level cisterns are largely intact. This building supported a water tank on its roof which was connected to the Fort's water supply system. An original skillion roof was replaced by a gable roof after the removal of the water tank apparatus. The date of this modification is not known. It is an unpretentious rendered brick building with timber clad vented gables. The facilities in the north room are no longer operational

### **The Inner Fortress Wall**

The inner wall to the dry ditch was also part of the Barracks construction. It extends for approximately 150 feet along the southern edges of the fortress. The wall is thought to be concrete, about 2 feet thick and ten feet high on its inner side. The lower half of the wall is carried down into the dry ditch and acts as a retaining wall. Various drainage and service pipes are visible on the outer surface of the wall. Loop holes are distributed along the length of the wall as firing positions in the event of landward attack. These loopholes are now glazed. The entrance gate is flanked by a pair of sandstone columns with simple capitals surmounted by a pair of copper lamps. The lamps are replicas of the originals, installed in 1983 and connected to electricity, with mantles simulating the original gas lamp.

The earliest gates were braced & ledged timber gates sheeted with steel plate externally, with a small personnel door (judas gate). The gates were reconstructed in 1980. The gates were in poor condition prior to the current program of restoration. Some bollards on the bridge are original, but those on the southern side of the dry ditch are 1983 replicas. The timber bridge was strengthened with steel beams in 1984.

## **4.6 THE BATTERY COMPLEX AND GUN EMPLACEMENTS**

*(Refer development plans, Figs 4.1 – 4.6)*

The fortress has changed relatively little over time despite the advancing technology, which made the advantages of the location obsolete and caused the fort to be abandoned rather than significantly changed. The changes that did take place tend to have been chiefly directed at the gun emplacements, rather than at the buildings, but the changes to the gun emplacements have been well documented elsewhere, particularly in the Fort Scratchley pamphlet by L. Carey and others, revised by R.S. Mort 1986 and in the I Wyness 1965 thesis, *Coastal Defences of NSW 1788 to 1900*. They are briefly covered below.

### **Submarine Mines Command and Observation Post**

The submarine minefield planned for the mouth of the Hunter River was one of three in NSW and was an essential element in the 19th century design of Australia's coastal defence network. Although the mines were ordered at a very early stage in the planning and construction of the Fort, the Command/Observation Post is not thought to have been constructed until the 1889-92 modifications to the Fortress.

It is located west of the barracks adjacent to the Fort wall. It is a partially buried installation, accessed down heavily worn and chipped slate steps. It consists of two rooms the test room, and mine firing position. The larger room contained the batteries which provided the electrical link with the mines, which were chained to the river bed and were detonated electrically by hand from the installation. The room is rectangular in shape with a wrought iron railed entrance door, at the bottom of the steps, remnants of bronze fittings indicate that care was taken to prevent sparks and fire. Two wrought iron brackets indicate the



location of a bench. A short flight of steps in the north wall gives access to a small irregularly shaped room which has an observation slit overlooking the river. A slate bench, thought to have been used for the depression range finder is the only remaining fitting in the room. The ceiling of this room comprises steel beams supporting a concrete slab. The other room has a concrete ceiling. Several examples of wartime pencil drawings and graffiti remain on the whitewashed walls, and include portraits in military attire.

In the main fort wall is evidence of a bolt-hole opening (doorway) through which personnel could access the Mines Command Post from inside the fort.

### **Gun Emplacements**

All areas within the battery are constructed of reinforced concrete between two and three feet thick, while the walls of the casemate are five feet thick. The walls, floors and ceilings are concrete and the external doors are armoured. Internally all metal fittings are nonferrous and tend to be brass or bronze and most fittings and fixtures are wooden. The concrete structures at the fort are early examples of the use of mass concrete in buildings in Australia. Typical of the period, mass concrete was used for the walls and concrete roof. Later suspended roof slabs were reinforced with railway lines in lieu of reinforcement.

The gun emplacement consists of three sections which are all located at different floor levels; the magazine is at the lowest level, the casemate is on an intermediate level and the eastern arc of guns en barbette are the highest. Consequently all floors in the tunnels are sloping.

The magazine which is the most deeply submerged structure on the site is centrally located between the eastern arc of guns. It consists of two parallel rectangular areas, subdivided into two rooms each. The structure is constructed of thick reinforced concrete and has several openings for dispensing charges and later, shells.

The parallel pairs of magazine rooms are separated by a central passage. A perimeter passage created a blast chamber around the magazine. The magazine is the central focus of an intricate network of passages which link all areas of the battery above.

The tunnel system includes a complex and effective system of terracotta ventilation pipes buried above the tunnels and below the Parade Ground. The walls and corners of the tunnels feature lamp enclosures, some now displaying replica metalwork fabricated from drawings obtained in England. The lamps were designed to protect the tunnels and magazines from naked flames.

The casemate battery on the north west side of the summit parade ground is an underground series of three chambers, housing guns overlooking the approaches to the port. This installation is augmented by an open gun pit on its west end which allowed coverage of the inner harbour as well. The three vaulted chambers are separated by central truncated walls or pillars. These internal walls form access ways at the front and rear of each chamber. The front access way allows access to the expense magazines which are located west of each chamber. A ventilation shaft at the rear of each casemate also served as delivery shafts for armaments when required.

The casemate and the western barbette are substantially unchanged since construction in 1882. The east chamber is the only one to have been significantly altered, during the 1911 conversion as an additional magazine.

The eastern arc of the gun pits is the part of the battery which has been most altered over time. It was constructed as three open pits, each with its own shell store and expense magazine located in its north wall. The pits were interconnected by an open passageway

which ran in an arc around the rear of the guns. The open passage was entered from the south adjacent to an artillery store, which backed onto a small arms store. It now has a concrete roof reinforced with bullhead section rails.

Although the basic layout of passages behind the gun pits has remained, the eastern pits which provided coastal defence were modified in each major modification to the battery. The various modifications however left considerable fabric from every period, and the layout and arrangement of the present battery is evidence of each of those modifications.

### **Battery Observation Post (BOP) Code 3210**

The Battery Observation Post (also commonly referred to as the Battery Command Post) was the communications centre for the battery. It was located centrally to the Fort battery with commanding views over the coast to the east, north and south, and had the advantage of elevation to gain maximum effectiveness for the depression range finder. The BOP was also removed from the flash, blast, noise and vibration of the guns<sup>50</sup>. As was the case at battery observation posts elsewhere, it was housed in a concrete blockhouse with a cantilevered flat roof giving an uninterrupted 200 degree arc for range finding and observing instruments. It was a highly specialised structure designed for maximum observation of targets and all areas of the fort. Similar examples exist at World War 2 coastal batteries at Cape Banks, North Fort and at interstate coastal battery installations.

The building was originally constructed in 1914 and replaced the function of the 3 depression range finder structures formerly located on the parade ground. It was constructed on the site of the signal station. It was originally built as a two storey structure with single storey stores and equipment area to the south side. The Observation level was extended during World War 2 over the stores with a timber floor, and a single storey extension was constructed to the west. Originally the only access was via a steel ladder through a manhole in the floor. A secondary access was provided in conjunction with the extension via an external stair. It was a fully concrete structure and curved parapets on the roof provided the structural support for the cantilever. The original walls were finished in 25mm render and the later extensions are off-form concrete. Windows to the observation level were originally bronze framed, and hinged at the bottom opening outwards. Concrete outriggers supported the open sashes.

Control of the 3 searchlights was taken over by the BOP in 1943 and a trench was dug across the parade ground for power from the searchlight generator and communications from the searchlight directing station. The location of this trench was visible in the parade ground until recent resealing of the surface (refer Figure 4.11). Other power and communications accessed the tunnels and a vertical ventilation shaft of the casemates.

The BOP had the following tasks:

To provide by depression rangefinder, target bearing and range data.

To provide data, via telephone lines, to the gun emplacements regarding the course and speed of vessels as well as the fall-of-shot observations if corrections to co-ordinates were necessary.

The Battery Observation Post was used for Counter-Bombardment and Close-Defence. The former was when it was possible to observe the approach of vessels beyond gun range (daylight) and the latter at night or poor visibility conditions with the assistance of searchlights.

The BOP was the communications and command centre of the battery, directed by the area command post at Shepherds Hill.

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<sup>50</sup> RK Fulford, *We Stood and Waited* p85-87

Evidence of the above fittings remain within the structure including the plinth for the mounting of the depression rangefinder, remnant electrical and communications fixtures and brackets for a reconstructed joinery bench and shelves. Walls have been left unpainted and remnants of the linoleum floor covering remain in the upper level.

The main instruments contained in the BOP included the following:

- Depression position finder
- Stereoscopic telescopes
- Decoder, fall-of-shot
- Indicator, time of flight

#### **Sites of the Original Depression Rangefinders**

The chief instrument in providing target information to the battery and gun emplacements was the depression range finder. It had the task of providing target range to the guns, selecting targets and adjusting by spotting corrections. Prior to the construction of the elevated instruments located in the BOP after 1914, the target sightings and calculations for the guns were provided by depression rangefinders in three locations, separated to ensure accuracy of sighting coordinates.

The locations of the original DRF's at the Fort constructed in the 1880's have been revealed during recent excavations at the site. Archaeological evidence of the DRF was uncovered of both the west and east installations during site preparation for the resurfacing of the parade ground and erection of the flagstaff in 1982 and are consistent with original drawings (refer Appendix 4). Footings and base slabs have been exposed for interpretation

## **4.7 MODIFICATIONS TO STRUCTURES**

### **1889-1894 Alterations**

As a result of an investigation of the New South Wales defence system in 1887 by Major General H. Shaw, the emplacement at Fort Scratchley was up-graded. The remaining northern signal mast and the pilots lookout were removed because of the proposed works and a new emplacement was to take their place including a new pit on the north end of the eastern arc. The lookout house was to be re-erected elsewhere on the headland. The work did not commence until 1888 and by 1889 it had also been decided to replace the existing 9 inch guns with hydro-pneumatic disappearing guns. The disappearing guns were an interesting technological development designed in response to the greater accuracy and fire power of the late nineteenth-century guns. The disappearing guns which allowed reloading in greater safety were also soon superseded, but not until after the existing pits were altered.

The pits were made circular and new shell recesses and arms stores were added although the existing shell hoists were retained. A wall was constructed on the west side of the arched passage and it was roofed over. The No. 3 shell hoist was altered and a cylindrical shaft added at this time and an internal blast proof wall construction was added to the No. 1 Gun emplacement.

At the end of the works carried out by James Russell between 1889 and 1892, Fort Scratchley was equipped with one 8 inch B.L (Breech Loading) disappearing gun, and three 6 inch B.L disappearing guns in the eastern arc.

In 1892 the decision was also taken to replace the 80 pounder casemate battery with three smaller 1.5" Nordenfeldt quick firing guns and two five barrel Maxim machine guns. It was also in this year that the Fort became known as Fort Scratchley. (p16 vol 2, Wilson and

Davies). In 1894 the electrical link between Fort Scratchley and the submarine mine system also came on line so the mines could be fired from the fort or from the Pilot Station. This appears to suggest that the submarine mine observation and firing post may have been constructed as part of the 1892 works, although it is equally possible that it was a separate and later exercise. The new pit between the batteries also received its 8 inch gun in 1894.

### **1910-11 Modifications**

The four disappearing guns were obsolete by 1910 and were replaced by two 6 inch MK VII B.L. guns, which provided a much more rapid fire cover. The two new-guns, required much shallower pits than the former disappearing guns. The two new pits were located one over the former No. 4 pit which was the northern most pit constructed in the 1889-92 works and the other between the No. 3 and No. 2 pits, and partially above the former No. 2 pit. These pits were connected by a new blast wall between the two which shield new stairs to the existing tunnels. The other pits were covered and used as storage areas interconnected by surface trenches. New shell and armoury stores were built around the guns and the shell lifts were modified. The shell lifts with hand winching mechanism are evocative features of the tunnels complex and remain today. They were extensively restored in 1979 and all metalwork was grit blasted and epoxy coated. Some elements have since deteriorated significantly.

The easternmost chamber in the casemate section was converted into a magazine. This involved the insertion of an interior brick wall in front of the former gun barrel slit (embrasure) and new doorways on the west wall. The Signal Station on the summit became obsolete in 1914, with the construction of a replacement on Nobbys Head.

### **1939-45 Expansion**

The advent of World War II also affected the Fort. The observation post was extended and the blast walls of the battery were reinforced. The searchlights and the searchlight directing station and generator rooms were constructed. These were typical military structures of their type, being flat roofed reinforced concrete structures.

The searchlights were located north east and southwest of the fort, outside the fortress walls. One searchlight engine room was located east of the gunners lavatories, just inside the wall and a second was located on the south east slope outside the wall. The engine rooms each housed a diesel engine 22 kilowatt direct current generator which powered the searchlights. An auxiliary searchlight engine room was built during World War II adjacent to the searchlight directing station.

A new brick guard house was constructed east of the gate in front of the laboratory, circa 1940. This guard house was similar but larger in plan to the existing guardhouse building, having two cells at the rear and a large open room in the front. In this case the awning was a cantilevered concrete slab and the parapet was decorated by nothing except gun slits in the southern parapet. This new guard house enabled the old guard house to be converted into a communications centre. In the original guard house the central wall between the old cells was removed and the former cells became a long narrow room, with the southerly door into the cells bricked up.

The vacant area between the old guard house and the westerly barrack block was utilized for a new concrete and brick walled building. This building appears to have been intended as new store rooms with the Officers bathing facilities on its western end. It consists of two narrow store rooms entered from the north with separate doors, lit only by glazed loopholes in the external wall. The officers' facilities are entered from a door adjacent to the barrack verandah on the west wall. A small wash house was also added to the west end of this building.

The facility was manned until 1972 by the Australian Army, but there was no longer any need to upgrade the fortress as other facilities in the area had taken over its function, so it virtually remained unchanged after World War II. The Fort was empty and subject to vandalism during the two years after 1972. In 1974 preliminary moves were made to secure the Fort, but by then considerable damage to the fabric had occurred. It resulted from the souveniring of items by army personnel as they left the Fort, as well as vandalism, neglect and deterioration of fabric which required regular maintenance.

### **1975-77 Phase I Reconstruction**

The first phase of the reconstruction work carried out in the 1975-76 period concentrated initially on security. \$11,000 was spent on the installation of a man proof perimeter fence, renovation of the lighting in the underground areas of the gun emplacements and hiring a security patrol. The Department of Administrative services then provided \$60,000 from its 1976/77 Repair and Maintenance allocation with work on the barracks and securing of the underground tunnels as the priority. Renovation works were completed on the barracks buildings prior to May 1977 when those buildings were handed to the Maritime Museum for their use. The reconstruction works to the barracks were substantial and involved the replacement of damaged or missing floorboards, the replication of doors, windows, columns and window sills. Waterproofing which consisted of new roofing, guttering and down-pipes throughout and cleaning and painting of existing surfaces.

### **1978-86 Phase II Reconstruction Works**

Although a plan for the future reinstatement of the Officers' Mess (Commandant's Cottage) was agreed to in 1977 by the Heritage Commission and the Department of Construction had prepared plans, the work was not commenced until 1978. In 1979 a further \$60,000 was allocated to the works. Plans were also made for the restoration of the Fort's tunnels and the parade ground.

Considerable undergrowth around the site was cleaned out in 1978 and the fence was relocated outside the existing perimeter, less conspicuously lower down the embankment. The tunnel complexes and guns were also cleaned out.

In September of 1978 the two guns previously removed from Fort Scratchley to Obelisk Hill were returned to the site amid some controversy over the amount of consultation which was desirable before such an undertaking should have been carried out. A master plan was proposed for the site in 1978 and Ms Judy Birmingham an archaeologist, was retained as the consultant.

In the Phase II reconstruction works the Commandant's Cottage was substantially reconstructed and deteriorated fabric was removed. Replica doors and windows were constructed, floor boarding replaced, and new ceilings, cornices and fittings were installed. A section of the dry ditch was excavated and investigated by archaeologists. Flagstones were uncovered at the floor of the dry ditch.

### **2007-2008 Phase III Conservation Works and Infrastructure (site services) Upgrade Refer to Existing Conditions 2008, Section 4.9**

#### **Large Guns**

The present layout of the Fortress has not been substantially altered since the c.1940 additions, although several of the previous armaments have been returned. The armaments in the fort after World War II were two six inch MK VII B.L guns and two one

and a half inch Nordenfelt guns. The guns were taken out of commission in 1962 and replaced by 40mm Bofors anti aircraft guns. The anti aircraft guns were removed from the site in 1972 when the light anti Aircraft Battery moved out.

In 1963 the Lord Mayor of Newcastle, Alderman Frank Purdue rallied support for the preservation of the "only two coastal guns in NSW ever to be used in combat". As a result of his efforts, eight hundred pounds were allocated from the King Edward Park Improvement Fund. Consequently the two guns with bodies, cradles and shields were moved to Obelisk Hill early in 1965. The pedestals, centre pivots layers and platforms and most of the traversing and elevating gears were scrapped.

The guns were returned to the Fort in 1978 and located in the cleaned out pits. In 1984 two pedestals were obtained from Georges Heights, Sydney, following consultation with the Australian Heritage Commission. The work was fully undertaken by Regular Army personnel and low loader. The guns are now mounted in the fort and have been substantially restored by the Fort Scratchley Military Museum Society. One of the guns is operational (pp31-32 1986. Fort Scratchley Pamphlet) and fired regularly.

The barrel of one of the 6 inch Mark V disappearing guns, mounted in the Fort in 1892 and removed in 1910 was returned to Fort Scratchley in 1984. It was used in the later part of its life at North Head School of Artillery. *(More needs to be added here regarding the gun in casemate No.3 and the barrel to be exhibited in GE:2.)* One of the original Nordenfelts was also returned to the site in August 1985. It is presently located in No. 2 casemate.

The guns were maintained and presented by the Fort Scratchley Military Museum Society as part of their display.

## 4.8 THE OUTER FORT

### General

The area outside the inner Fort, bounded by Nobbys Road and Fort Drive (Military Road) has been continuously occupied by activities related to navigation or the military since European settlement. In 1937 nine cottages were still aligned along Nobbys Road. These cottages were shown in Scratchley's 1878 plan as pilots' accommodation. The terrace over the road was boatman's accommodation. An iron shed was located on the east side of the road leading to the Fort gate. A 1939 survey showed the occupation of the land around the Fort unchanged. By 1947 the utilization of the west side of the hill had substantially changed. A Royal Australian Engineers camp which had replaced some of the former pilots cottages was removed from site on 2/12/1947 and only the southern three cottages which are identified as army married quarters remained. By c.1947 an Ambulance station was constructed east of the junction of the Fort approach road and Nobbys Road. It consisted of a double garage, with four adjoining rooms and a separate single garage.

### The Emergency Services Depot

The Department of Works and Housing were interested in acquiring a depot in Newcastle as early as 1947 and approached the Army for the use of the "old Ambulance Station". In late 1948 a five year occupancy was recommended for the Stores Depot and Garages on the former Royal Australian Engineers' site not the Ambulance Station site. It was occupied by the Department of Works and Housing in 1950 and a works store depot was constructed including a caretakers cottage on the east side of Nobbys Road. The works depot site was expanded by the addition of a further piece of land on the southern side of the original depot in 1951.

From north to south the various buildings numbered according to a 1951 drawing were:  
Building 1 A joinery shop and store  
Building 2 Inflammable store  
Building 3 & 4 Timber store, vehicle garage, toilets and lunch room over  
Building 5 Depot office and caretakers residence  
Building 6 & 7 Vehicle servicing and greasing garage, electrical store, plumbers  
store tool store and mechanical store.

The former works depot was then earmarked for demolition and is currently open space.

### **Open Space**

A 1956 plan of the southern part of the site shows the three weatherboard married quarters cottages in the area of the present playground, with four smaller buildings above the slope behind the cottages. On the Military Road/Nobbys Road corner were the Ambulance Station, and up the drive, the Sergeants' Mess, the Chief Gunners' Cottage (MQ172), The Canteen, a tennis court, and the men's mess. Ten of the Fort Scratchley buildings were sold in an auction of surplus buildings from both Fort Scratchley and Camp Shortland on 16/6/73. The transport garage, the Master Gunners' Cottage, and the searchlight Generator house were the only buildings left on the southern area of the site in 2003.

### **The Master Gunner's Cottage**

Around 1977 the Master Gunner's cottage was also offered for lease to the Newcastle City Council who were initially not interested. After expressions of interest by the Jobless Activity Centre personnel, the Council leased the cottage in February 1978 as soon as it was vacated by the Army, and it functioned as a Jobless Activity Centre for several years, and was locally known as the *Newcastle Out of Workers Centre*.

The Master Gunner's cottage is the sole remnant of the married quarters buildings which were formerly located south-east of the Fort. It is a weatherboard cottage with a corrugated iron gable roof standing in a large yard. It was constructed circa 1926. A verandah shelters the north western elevation of the building. Three doors which consist of twelve glazed panes above a pair of panels, open onto the raised verandah which is surrounded by brick foundations. The cottage consists of four rooms, a small bathroom and kitchen in the main block. The laundry and toilet are located in a new wing on the west side of the cottage. The building was extensively renovated with full internal relining during the 2007-2008 refurbishment. The cottage roof was replaced in the 1970s and a single chimney is located in the north end of the gable roof. The present garden picket fence is also a replacement.



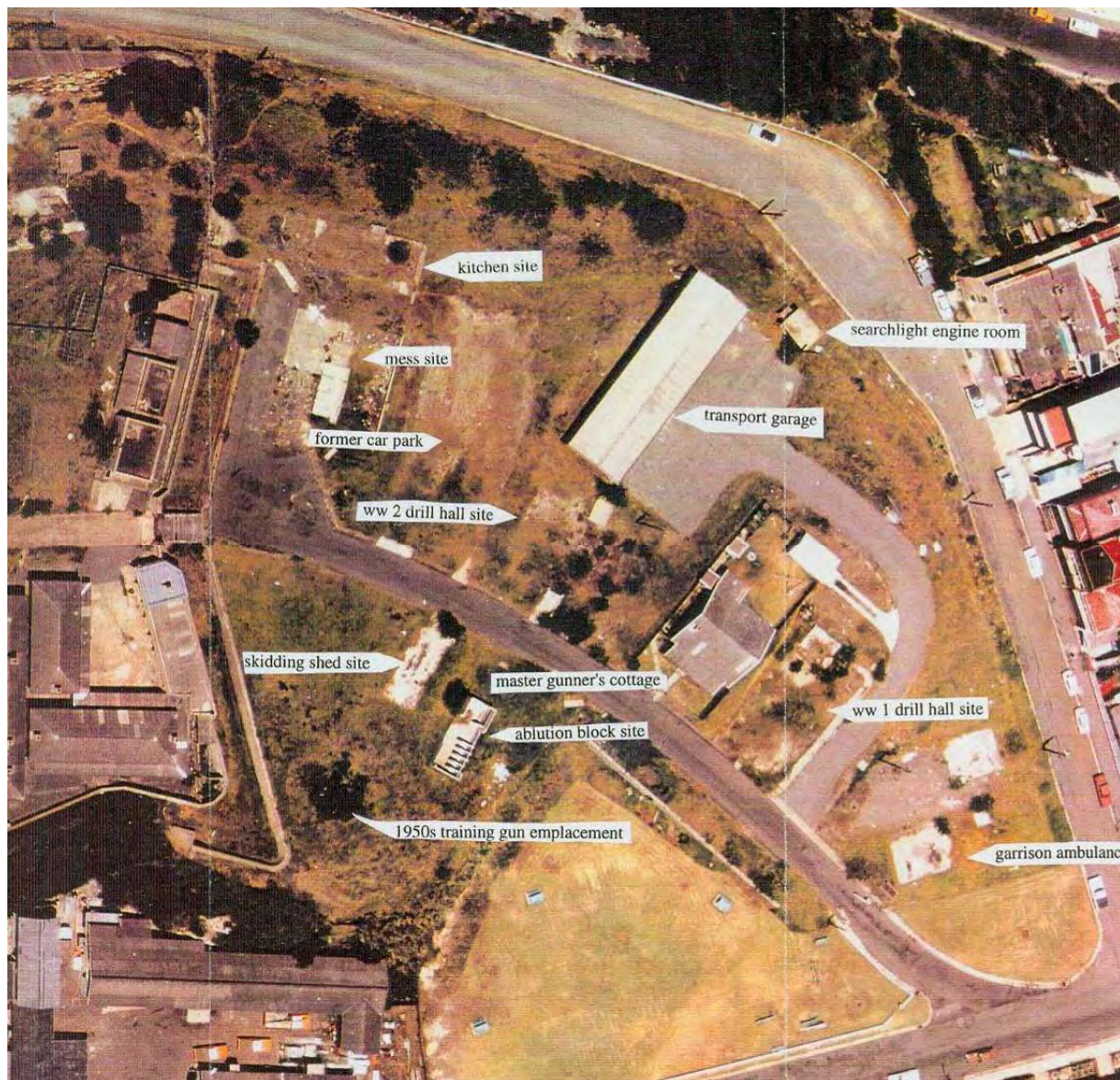


Figure 4.7. Aerial view of outer fort precinct in 1973, immediately after removal of annotated buildings (Austral Archaeology Pty Ltd)



## 4.9 EXISTING CONDITIONS 2008

### Introduction

As a precursor to transfer of custodianship from the Commonwealth to the City of Newcastle (Council) a costed scoping study of required Works was undertaken and prioritised. This formed the basis of a design and documentation Brief undertaken by Suters Architects and a team of subconsultants, tendered in 2005. After a commitment of additional funds by the Australian Government the project was contracted in 2007.

During the intervening period a contaminated soils remediation project was undertaken (capping and some removal of soil) including asbestos and lead paint removal. This altered site levels, stripped all paint from within inner fort buildings, left the Master Gunner's Cottage without any internal linings ceilings and mouldings, removed panels from clerestory windows around Barracks.

Structural investigations and analysis lead to the demolition of the Transport Garage and works to the rampart walls above Fort Drive. The Transport Garage was a steel portal and brick building. Most of the slab was retained.

Newcastle City Council required that in addition to museum activities, the site be capable of other 'cash-flow' activities prior to transfer. Consequently, The Hall (a multipurpose centre) and café were included in the project scope. Prior to the contracting Works extensive theft and vandalism resulted in the loss of copper gutters and downpipes, smashed window and door joinery and graffiti.

### Project Priorities

The existing conditions now, relate to the key areas of the 2007-2008 Works:

- building/site services infrastructure upgrade
- reducing water ingress
- access and safety
- reducing future maintenance
- preserving the character of the place.
- removal of elements 'intrusive' to the heritage significance of the place.

### Inner and Outer Fort Precincts

This examination of existing conditions uses the concepts on Inner and Outer Fort, the Fort Entry being at the corner on Nobbys Road and the building identification code adopted for the contract documents. This code system could be later adapted to planning and managing on-going maintenance.

The description of existing conditions generally proceeds from the entry and site perimeter, through the buildings then into the tunnel system.

### Site Conditions – Outer Fort

- A new white painted timber ordinance fence extends from the north along Nobby's Road up to the Fort driveway, from the driveway to the corner of the site, along the Fort Drive boundary terminating at the corner of the new Workshop Building.
- A new white painted timber ordinance fence has been constructed above the retaining wall south of the existing public playground.

- Sections of lapped timber paling fence has been constructed between the gate posts and parallel to the retained remnant foundation wall, facing Nobbys Road at the entry.
- A new kerb ramp has been installed at Fort Drive.
- A new all weather concrete path has been constructed from the kerb ramp to the playground, from the entry gates to the dry ditch bridge parallel to the driveway, from the Workshop Building (4220) to The Hall (new Multipurpose Centre 4250 ), from The Hall to the driveway and to the formalised carpark.
- New gate posts and timber framed, stainless steel mesh infilled gates for pedestrians and vehicles have been installed at the entry.
- A new substation has been installed, accessed from Fort Drive.
- A picket fence surrounding the Master Gunners Cottage has been rebuilt.
- A new workshop Building ( 4220 ), replacing the demolished Transport Garage, has been constructed. This building uses the same position on the original slab, the same building form, ridge height and roof pitch as the Transport Garage.
- A new Multipurpose Centre has been constructed on the former practice parade ground, south of the remnant foundation wall of the long demolished weatherboard Mess Building. Areas have been topped and turf laid around the MPC.
- The existing carpark adjacent to the dry ditch has been formalised, regraded to the existing concrete spoon drain, resurfaced, wheel stops installed and line marking applied.
- The existing carpark between the Master Gunner's Cottage and the new Workshop building has been modified, completed, resurfaced and line marking applied. New kerb and guttering constructed.
- No work has been undertaken to the existing emergency generator building adjacent to the new Workshop Building.
- A new fire booster valve assembly has been installed adjacent to the new entry gates.
- New service mains have been laid in trenches under and beside the new concrete pedestrian path running parallel to the driveway. Core holes were made in the dry ditch wall and services were trenched across the dry ditch, through core holes in the inner fort wall into the new Electrical/Comms Room (1212).
- Existing sandstone spoon drains in the dry ditch were unearthed, cleared and restored. New areas of turf were laid in the dry ditch adjacent to the bridge.
- New pits and pit covers have been installed in relation to new site services.
- New timber poles and pole mounted area lighting has been installed adjacent to the existing driveway

### **Buildings – Outer Fort**

- The Masters Gunner's Cottage has been re-roofed, repainted, has undergone weatherboard replacements, has new verandah boards installed, the metal electrical meter box removed, new ceilings, linings and timber mouldings throughout, new floor coverings, lighting, plumbing and locking.
- New sentry boxes (2) have been reconstructed and installed. One is additional.

### **Site Conditions – Inner Fort**

- A significant number of mirror finished stainless steel handrails and guardrails have been installed at changes of level, steps and inclines throughout the inner fort precinct, using core holes and epoxy.
- New asphaltic concrete pavement has been laid to pathway areas at the left and right of the entry driveway inside the bridge gates, up to the verandah of the Canteen and Stores Building ( 1240), outside the NCO's Ablutions Block, west of the Barracks Building (1230), east and west of the Commandant's Cottage, the driveway to the Parade Ground (3110), over GE: 1 (2211), across to (but not over) GE:2, over upper tunnels passageway (2130/2140), over the casement (2410/2420/2430), over Parade Ground (3110) and through the Western Barbette (3250).
- A wide all weather concrete path has been constructed around and between Gun No.1 and Gun No.2, around the base of the Flagstaff and from the Flagstaff to the Parade Ground.
- Turfed earth berms have now been formed to the north-east and east at the perimeter of the existing grassed area.
- The bank behind and to the north of 'new' Guardhouse (1140) has been cut back and hydro mulched. A brickwork spoon drain behind the Guardhouse (1140) has been unearthed and repaired.
- The earth bank above the rampart wall to the east of the searchlight station has been cut back, excavated and reformed.
- The stone walls to the east Kitchen Block (1260) and Canteen and Stores (1240), below the driveway have been rebuilt or repaired and a new stone kerb has been constructed to the right hand side of the driveway up to the artillery store
- A chemically welded polyester waterproofing membrane has been installed over the casemate, over GE: 1, passage (1240) over the tunnel at the entrance to GE: 3 then concealed with asphaltic concrete.
- The slab over Gun Emplacement GE: 2 (2221) has been removed and not replaced.
- The rectangular brick water storage cistern beneath the courtyard (1250), Bathroom (1214) and Toilets (1215) has been filled with sand to support it (potential vehicle loads). The stormwater diverter has been retained.
- The outer face of the west dry ditch has been exposed to view from Nobbys Road with the removal of overgrowth.

- The metal covers to the Casemate vents have been removed, cleaned, treated and recoated and replaced.
- New site services and hydrant services have been laid in trenches and reticulated throughout the site and concealed.
- Site flood lighting, verandah lighting and security lighting have all been removed and upgraded.
- The inner fort wall (bridge) replica gates have been renewed.
- The flagstaff was dismantled, metalwork repaired, all repainted then re erected with new guys and stays, new anchor points and new fittings.
- The remnant brick walls of the Commandant's Garage (1410) have been structurally propped for safety.
- Graffiti has been removed.

#### **Buildings – Inner Fort**

(General notes for ALL buildings will not be repeated under each building heading)

- All buildings have been reroofed and where possible, insulated at the ceiling and under the roofing, new gutters and downpipes installed, where flat roofs had membranes they have been removed and renewed.
- Metalwork items including wall vents, hatch covers, bars, doors, brackets and verandah columns have been cleaned back, treated and recoated.
- All previously painted elements have been cleaned back and repainted.
- All broken glazing bars, windows sashes, doors, door frames have been repaired or replaced.
- Cement render repairs have been carried out to buildings where cracks and fractures had existed, where chimney and verandah flashings have been disturbed by re-roofing where earlier patching to walls and sills had failed and where the plinth band at the base of walls was broken or missing.
- Metal grilles installed by the Maritime Museum have been removed, masonry anchors drilled out and window reveals repaired. Laminated safety glass and window locks installed. New door locking (keyed alike) has been installed throughout.
- A new wireless movement detection system was installed throughout.
- Electrical reticulation, lighting and plumbing has all been replaced and upgraded.
- The Searchlight Generator building (1110) north end was unearthed to reduce moisture penetration and damage.
- The Gunners' Toilets building (1121, 1122) have been cleaned out, repaired , repainted and bird netting installed.

- The Laboratory building (1131-1132) has been cleared out, wall mounted air conditioning unit removed, timber doors rebuilt, new soffit mounted lighting installed, glass installed and the asbestos cement sheet clad skillion addition to the north side completely removed. The ground slab with perimeter hob remains. No new painting inside or out apart from metalwork and doors.
- The 'new' Guardhouse' (1140) has had extensive repairs to the brickwork parapet including vertical, post tensioned reinforcement. Corroding imbedded metal has been cleaned back and treated, cracked walls repaired, wall vents repaired, windows rebuilt and reinstalled with flashings. The interior has been repainted. The roof membrane has been renewed. The rough concrete retaining wall has been removed from the north-west corner. The north wall has been unearthed, exposing a brick spoon drain. The bank to the north has been trimmed back.
- The original Guardhouse (1211) no longer houses the main electric distribution equipment. External cable risers have been removed. Lighting has been replaced. A new external timber FHR cupboard has been installed. The timber floor has been exposed.
- The Ablutions Block (1210), room (1212) Electrical and Comms now has an elevated modular floor over a major cable entry through the concrete floor (from the Dry Ditch) and houses new electrical, and communication distribution equipment for the site. The ceiling is new, replacing the asbestos fibre cement linings. Lighting is new. The walls have not been painted.
- The Store (1213) has a new ceiling and new lighting. A workbench is along one wall has been retained. The walls have not been painted. There is an open vestibule (no door frame) at the courtyard step. The south parapet has had vertical post tensioned reinforcement drilled into it, anchoring to the fort wall below.
- The Bathroom (1213) fixtures have no water supply or drainage. (Exhibition only). There is a new ceiling. Apart from the ceiling the interior has not been repainted. The south parapet has been vertically reinforced, lighting has been renewed.
- The Toilets (1215) fixtures have been completely removed, a new drainage system and floor slab installed and a new public amenities layout provided with new internal walls, partitions, painting, tiling, lighting and signs. The main door now swings outwards to permit entry up a short shallow ramp. The ceiling is new with new batten cover strips. The south parapet has been vertically reinforced. Major cracking in the north wall has been repaired and a new window installed.
- The NCO's Ablutions Block (1220) have had all floor coverings removed. The framing and fascia above the north masonry wall been renewed and door heads repaired. The rooms have been cleared out. The glass infills to rifle holes have not been replaced.
- The Store (1216) contemporary particle board joinery and finishes have been removed and the room cleared out. The window lintel rebuilt and door and window repaired. Water supply has been capped. No new internal painting. Cracking at the external chimney has been repaired.
- The Barracks Corridor (1230) has been skim coated, sanded and repainted , new lighting and linoleum floor coverings installed, new and recycled door hardware installed . Doors and windows extensively repaired or replaced. The high level clerestory windows opened up and in some cases reglazed with lapped glass. On

the south east side external timber louvres reinstated and on the north west side an external panel of clear polycarbonate sheeting installed. The ceiling was not replaced.

- The Barracks South (1232) has been skim coated, sanded and repainted , new lighting and linoleum floor coverings installed, new and recycled door hardware installed . Doors and windows extensively repaired or replaced. The high level clerestory windows opened up and in some cases reglazed with lapped glass. On the south east side external timber louvres reinstated and on the north west side an external panel of clear polycarbonate sheeting installed. Existing shelves were repaired and new hat pegs installed. The fire place was opened up and birdproofed at the top (ventilation). The damage to the stone sills resulting from paint stripping is to be painted with a suitable binder that allows moisture to escape the stone but contain the dust. The sills require a suitable plaster coating prior to final repainting to match the wall. The ceiling was not replaced.
- The Barracks North (1231) has been skim coated, sanded and repainted , new lighting and linoleum floor coverings installed, new and recycled door hardware installed . Doors and windows extensively repaired or replaced. The high level clerestory windows opened up and in some cases reglazed with lapped glass. On the south east side external timber louvres reinstated and on the north west side an external panel of clear polycarbonate sheeting installed. Existing shelves were repaired and new hat pegs installed. The fire place was opened up and birdproofed at the top (ventilation). The damage to the stone sills resulting from paint stripping is to be painted with a suitable binder that allows moisture to escape the stone but contain the dust. The sills require a suitable plaster coating prior to final repainting to match the wall. Remnant colour was retained at the fireplace mantel. Walls were left untreated behind the door swing to demonstrate the construction techniques utilised. The ceiling was not replaced.
- The Recreation Room (1243) has been skim coated, sanded and repainted , new lighting and linoleum floor coverings installed, new and recycled door hardware installed . Doors and windows extensively repaired or replaced. The high level clerestory windows opened up and in some cases reglazed with lapped glass. Existing shelves were repaired and new hat pegs installed. The fire place was opened up and birdproofed at the top (ventilation). The damage to the stone sills resulting from paint stripping is to be painted with a suitable binder that allows moisture to escape the stone but contain the dust. The sills require a suitable plaster coating prior to final repainting to match the wall. The ceiling was not replaced.
- The Canteen (1242) walls were skim coated, repainted and a new sheet vinyl floor covering installed to a cove. A new handwashing basin was installed and a new stainless steel bench and sink. New plumbing, lighting and power was installed .A new insect mesh screen door and window screen were installed. Doors and windows were extensively repaired. The pass-through to the Recreation Room was reopened. The ceiling was not replaced.
- NCO Room 1 (1241) walls were skim coated , the room repainted , door and window repairs carried out, new lighting , power and phone point and the infill between the room and the canteen rebuilt. The ceiling was not replaced.
- NCO Room 2 (1244) walls were skim coated, the room repainted , door and window repairs carried out, new lighting , power and phone point and the infill

between the room and the canteen rebuilt. Floor boards replaced. The ceiling was not replaced.

- NCO Room 3 (1261) has been stripped of all recent office joinery, the fireplace reopened and the room repainted. Windows and doors replaced , new power and lighting installed. The floor covering (vinyl tiles) and underlay removed and the floor boards sanded once. Floor boards were repaired or replaced. The ceiling was not replaced.
- NCO Room 4 (1262) has been stripped of all recent bookshelf joinery, the fireplace reopened and the room repainted. Windows and doors repaired , new power and lighting installed. The floor covering (vinyl tiles) and underlay removed and the floor boards sanded once. Floor boards were repaired or replaced. The ceiling was not replaced.
- Barracks Office (1263) has been stripped of all recent display joinery, the fireplace reopened and the room repainted. Windows and doors repaired , new power and lighting installed. The floor covering (vinyl tiles) and underlay removed and the floor boards sanded once. Floor boards were repaired or replaced. The ceiling was not replaced.
- The Store (1264) walls were skim coated , the fireplace reopened and the room repainted. Door and window repairs undertaken. The vinyl tiles and underlay removed. New power and lighting installed. The ceiling was not replaced.
- The Wash Room (1265) carpet was removed and the floor repainted. The walls were skim coated and the room repainted. Door and window repairs were carried out. New power and lighting installed. The ceiling was not replaced.
- Kitchen (1266) walls have been patched and repainted. Door and window repairs have been carried out. The carpet removed. The room has been repainted. New power and lighting installed. The ceiling was not replaced. This room has moisture content problems in the two external walls.
- The Store (1267) has been repainted, door and window repairs carried out , new power and lighting installed. The ceiling was not replaced.
- The Office (1268) has been repainted, door and window repairs carried out , new power and lighting installed. The ceiling was not replaced.
- The Coal Bunker (1270) top lid was restored, treated and repainted. The bottom hopper replica was reinstated and painted.
- Toilets (1321) WC1 has been repainted . A new insulated raking ceiling installed, new toilet suite and handbasin installed and glazing renewed. New power and lighting, new mirror. Door repairs were carried out.
- Toilets (1321) WC2 has been repainted . A new insulated raking ceiling installed, new toilet suite and handbasin installed and glazing renewed. New power and lighting, new mirror. Door repairs were carried out. Remnants of a urinal partition were removed. Remnant evidence of previous paint colours have been retained.
- Store (1320) has been stripped of “darkroom” fitout, services capped, the room repainted with new power and lighting installed.

- Bedroom 1 (Office) (1311) has been stripped of redundant cabling, door and window repairs carried out , the room repainted including fireplace, the floor left as found.
- The Sitting Room (1312) ceiling has been repaired above the chimney breast, door and window repairs carried out, the room repainted including fireplace, the floor left as found.
- Bedroom 2 (1313) has been stripped of redundant cabling, door and window repairs carried out , the room repainted including fireplace, the floor left as found. The French doors rebuilt.
- Bedroom 3 (1314) has been stripped of redundant cabling, door and window repairs carried out , the room repainted including fireplace, the floor left as found. The French doors rebuilt.
- Servants' Passage. The box gutter removed , new framing constructed and new gutter installed and above gutter boards, all repainted.
- Pay Room ( 1319) has had all electrical equipment removed, a ceiling installed and cable holes filled in walls and floor, Door and window repairs have been carried out including to the pass-through to Office. The room repainted and new power and lighting installed.
- Servant's Bedroom (1317) has been stripped of redundant cabling, door and window repairs carried out , the room repainted, the floor left as found. A new electrical sub board installed. The south wall has moisture content problems.
- Kitchen (1316) was stripped of the recent kitchen joinery and floor finishes. The sink removed and all services capped. The fire place was reopened and the room repainted. Door and window repairs were carried out.
- Wash House (1315) has had very little work carried out. The ceiling has been repainted , new plumbing installed over the tubs, the benches retained, door and window repairs carried out and new power and lighting installed. The floor was left as found.
- Stair 3 to Servant's Room. New handrail and top gate. Doors were repaired.
- Servant's Room (1318) has had a new shower recess , hot water unit and exhaust fan installed. The room and WC have been repainted. The east wall has moisture content problems. New power and lighting has been installed.
- The Artillery Store (2110) has been stripped of recent stud walls , cleaned back , leaks repaired , new power, lighting , comms and security installed and the room repainted in limewash, floor in paving paint. Extensive repairs were undertaken to the concrete and steel lintel above the large sliding door. Metal work items to cleaned back, treated and repainted.
- The Battery Observation Post (3210) has had extensive concrete repairs inside and out for example to the outriggers but mainly to the interior, cutting deteriorated spalling areas back to the steel reinforcement and patching with new reinforcement and contemporary cement epoxy products. This was typical to the head and sill of the long unsupported window opening. New stainless steel structural supports have been installed beneath the outer edge of the large cantilevered concrete roof

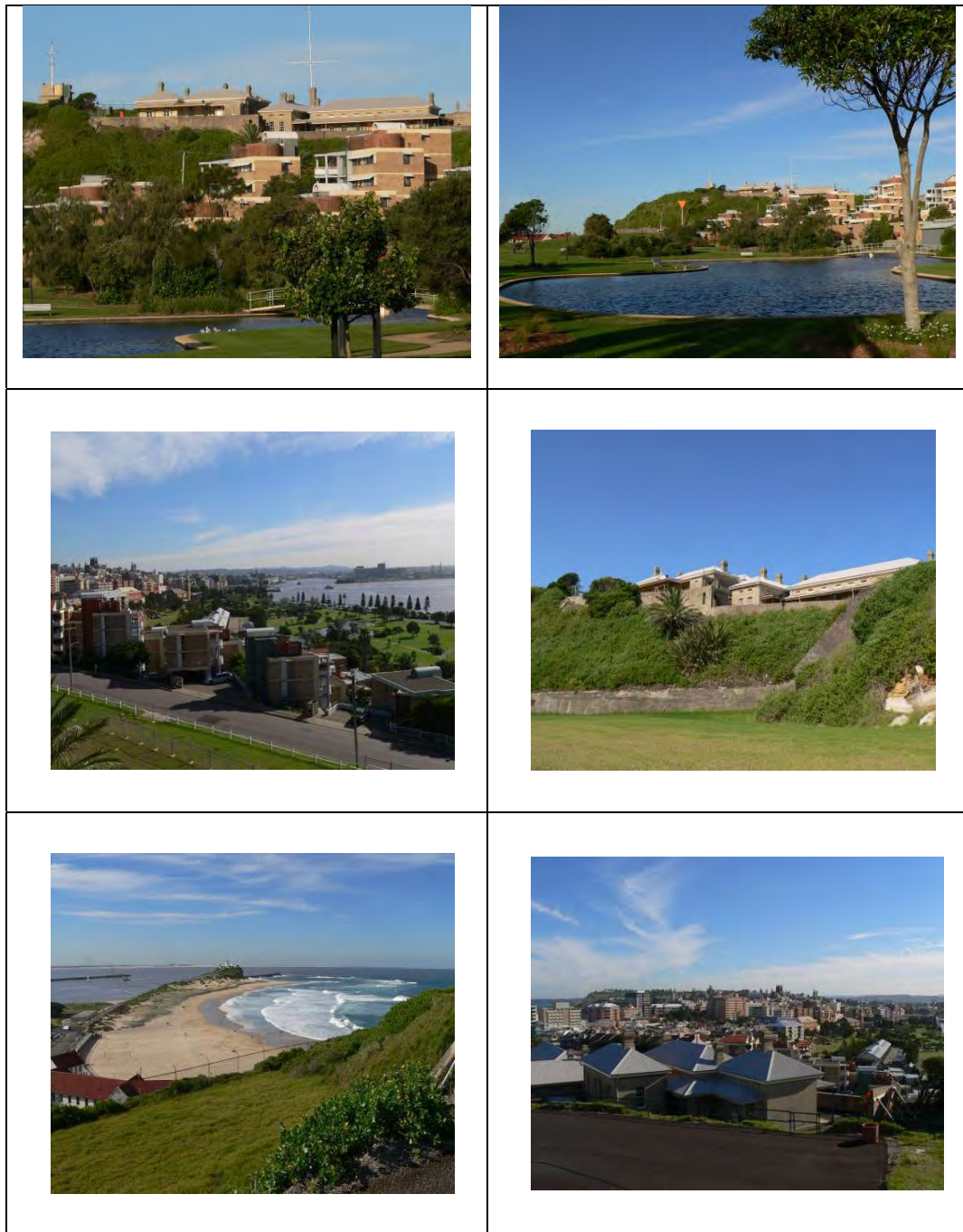


structure, inside the window line. New brass windows have been installed emulating the windows depicted in photographs and similar to remnants of frame found insitu. The window sashes (hoppers) are hinged at the bottom opening outwards. New and repaired timber doors were installed and painted. A new galvanised steel stair was installed to replace a previous timber stair. A new steel door and frame was installed at the external stair entry and painted. New power and lighting was installed. A new electrical sub board was installed beneath the stair landing to service the Parade Ground (3110). A new granolithic topping was laid over the existing north landing and a new concrete path placed to the west, leading from existing steps to the new stairs. The interior was NOT repainted. A new shelf was installed under the window sill. Timber flooring has been repaired. The signal mast was not repaired or repainted.

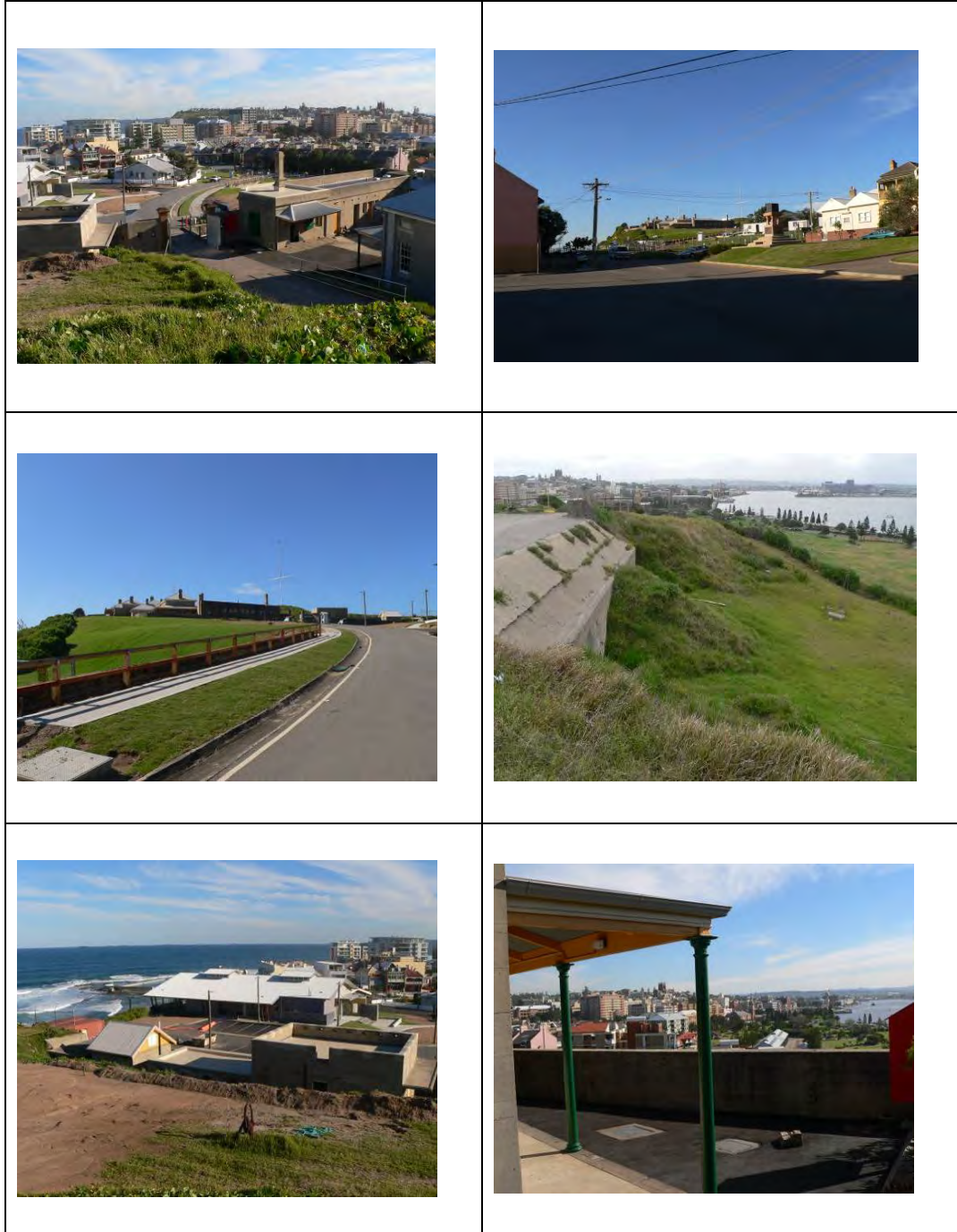
- Mines Firing Station. Apart from removing soil build up, new lighting and power, upgrade to the lintel of the entry door and modifications to the security gate no other work has been carried out . The steps require conservation.
- The Search Light Station (east) was partially demolished (from the window head up) and rebuilt. The interior has been left with an off-the-form finish and the exterior cement rendered to falls and pencil rounds. Adjacent steps have been uncovered through bitou bush removal.
- The Tunnel System of passages and rooms beneath the Parade Ground has been extensively repaired. Areas of soft or deteriorated concrete have been repaired using contemporary epoxy cement products then plastered and limewashed. Railway sections used to support later roof slabs have been needled back, cleaned, treated and repainted then limewashed. The top of these slabs have new polyester membranes concealed beneath new asphalt. Pinhole leaks have been sealed and cracks arching over tunnel passages have been cut, drilled and filled from the base to the apex, ground smooth , plastered and limewashed. Existing stencilled signs through the tunnel system were protected during the new limewashing process. All power and lighting has been replaced including distribution boards. A system of new conduits has been run throughout the tunnel system for emergency lighting, smoke detection, power, lighting and data, with spare capacity. All floor surfaces previously painted have been repainted. Floor plates have been fixed over spoon drains (for safety) across door thresholds and passageways. New handrails and a stair climber seat have been installed. Reveals and openings rebuilt and new timber doors and windows have been installed, Metalwork elements have been cleaned back, treated and repainted. New asphalt has been laid in areas of rough or uneven surfaces within the tunnel system. Timber hat pegs have been reinstated and painted.
- Tunnel Entrance (2130) features a new electrical distribution cabinet and lighting controls. All tunnel lighting is incandescent and dimmable. Conduits have been cut in across the floor to the board and concealed with asphalt pavement.
- Small Arms Store (2120) has been cleaned out , new cold water supply installed , metalwork and doors painted.
- GE;1 (2211) roof slab (former disappearing gun opening) has been retained for the short term, with structural steel props. This is to be removed when the new museum develops the armaments exhibition.
- GE:2 (2221) roof slab has been removed and left open.

- GE:3 (2231) has been retained as is , new services and limewash. No work was undertaken to the shell lifter (or any lifters elsewhere in the complex). The soffit outside GE:3 was scabbled and reset.
- Crew Area (2150) has been repainted and all windows rebuilt.
- Stair 9 (2170) repainted and new handrail installed.
- Behind Casemate Battery 1 (2410) left untouched, cleaned up , leaks repaired and a new spoon drain constructed to replace a cracked drain at the surface above.
- Interpretation: Various devices including suspended story panels and signs have been installed.

#### 4.10 PHOTOGRAPHIC SURVEY OF THE SITE 30 APRIL 2008



**Figure 4.8**  
**The Setting**

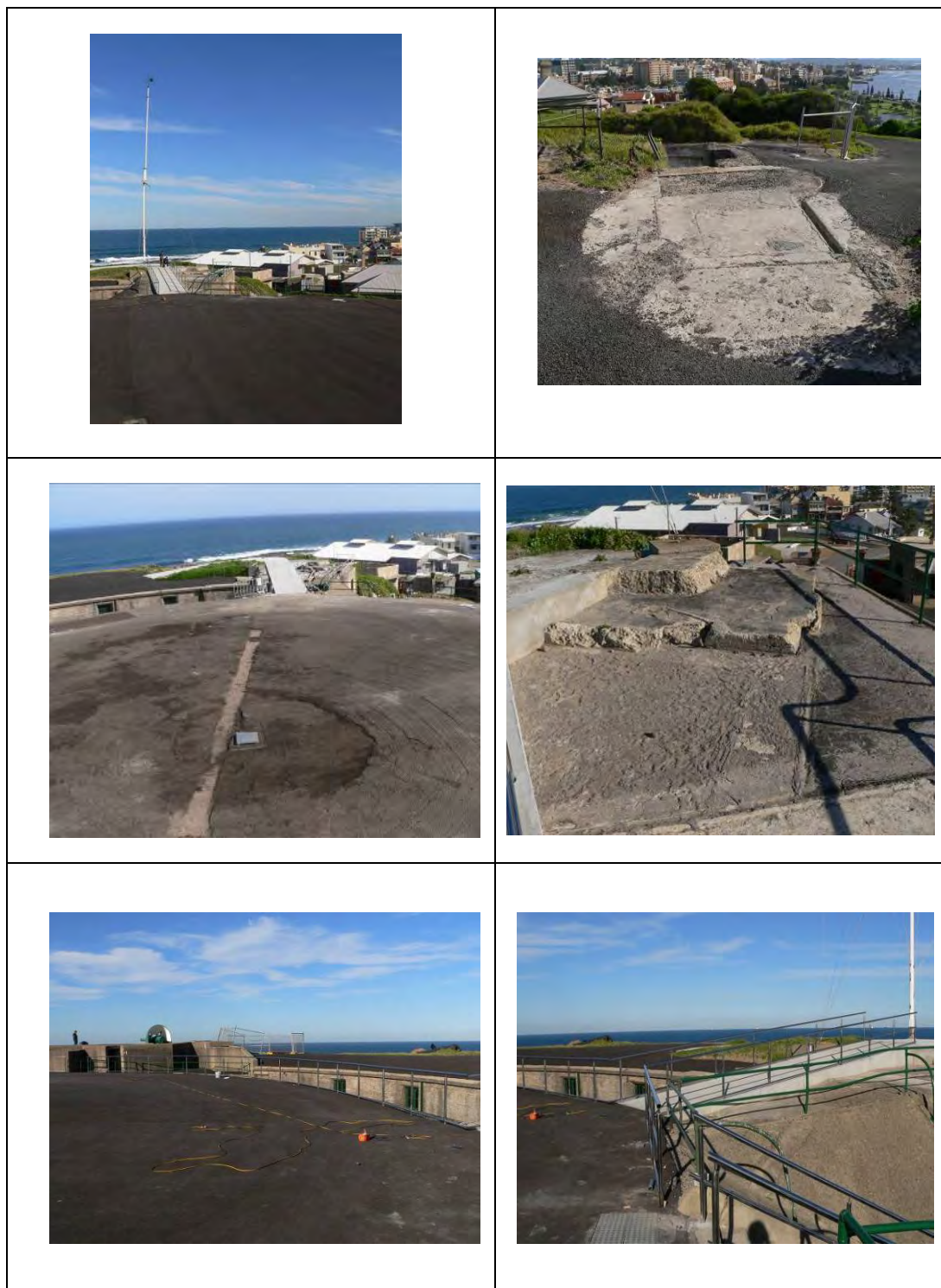


**Figure 4.9**  
**The Setting – the city and approach to the Fort**



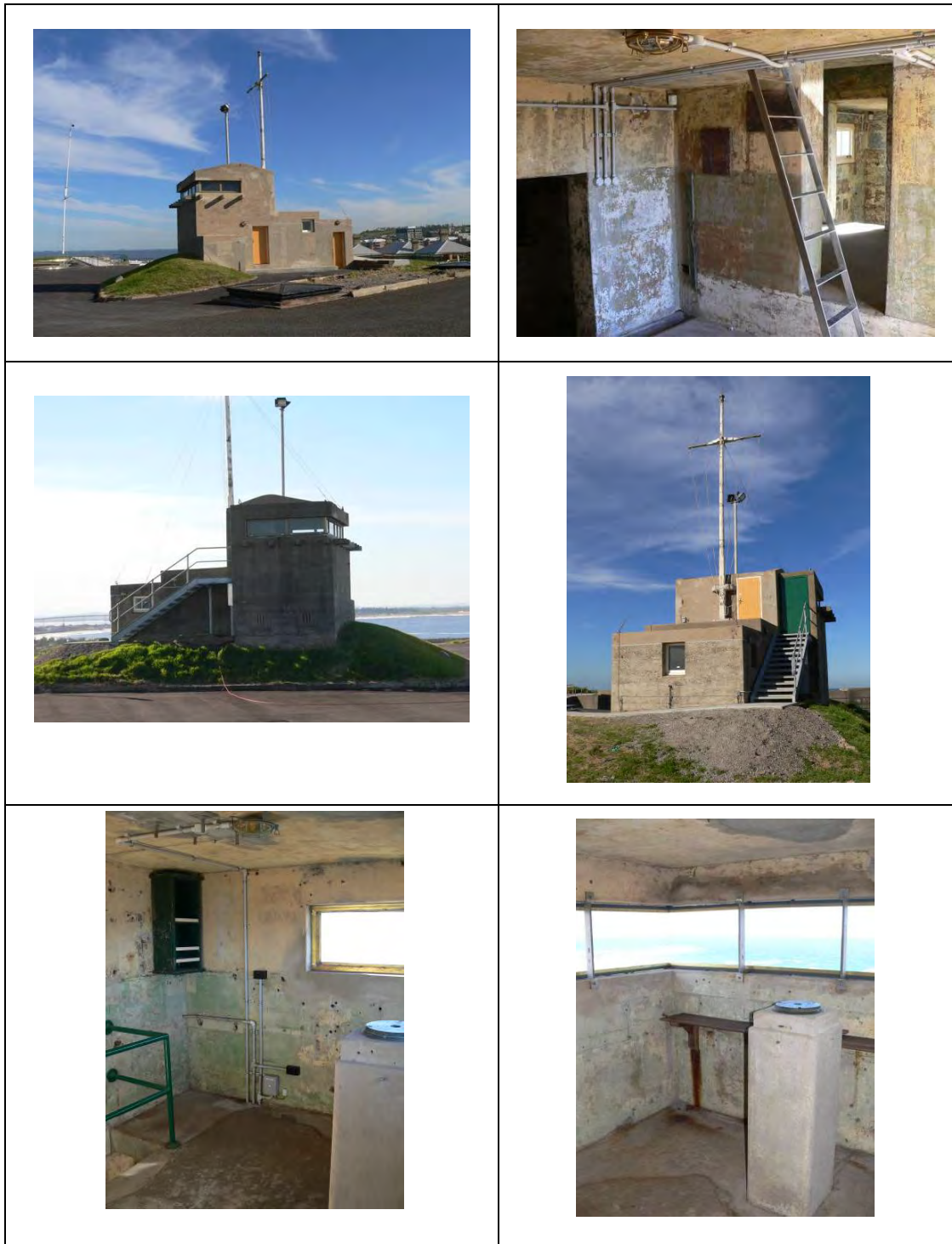


**Figure 4.10.**  
**The Barbettes**



**Figure 4.11.**  
**The parade ground and Depression Range Finders**





**Figure 4.12.**  
**Battery Observation Post**

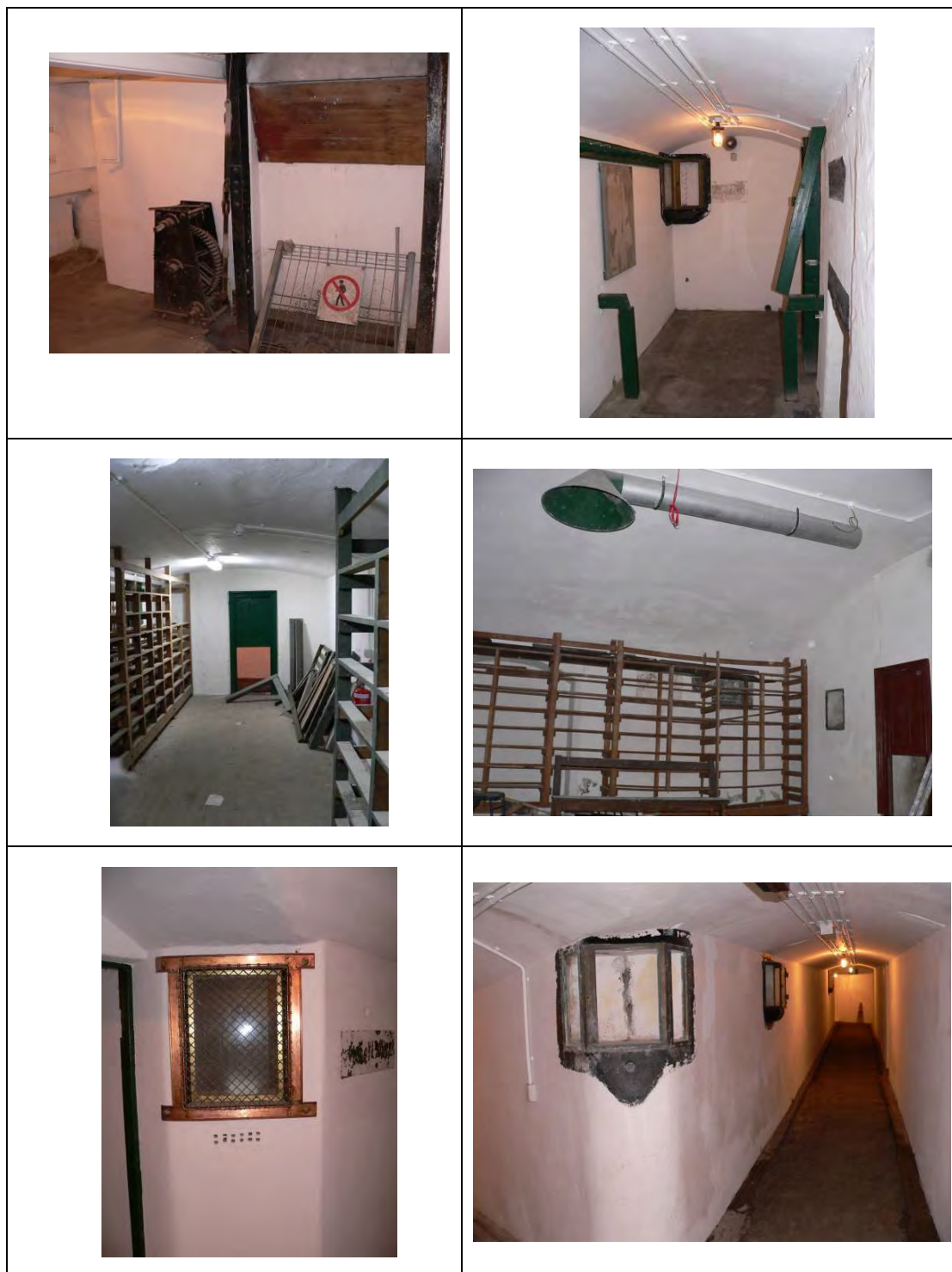




**Figure 4.13**  
**The casemates and western barbette**

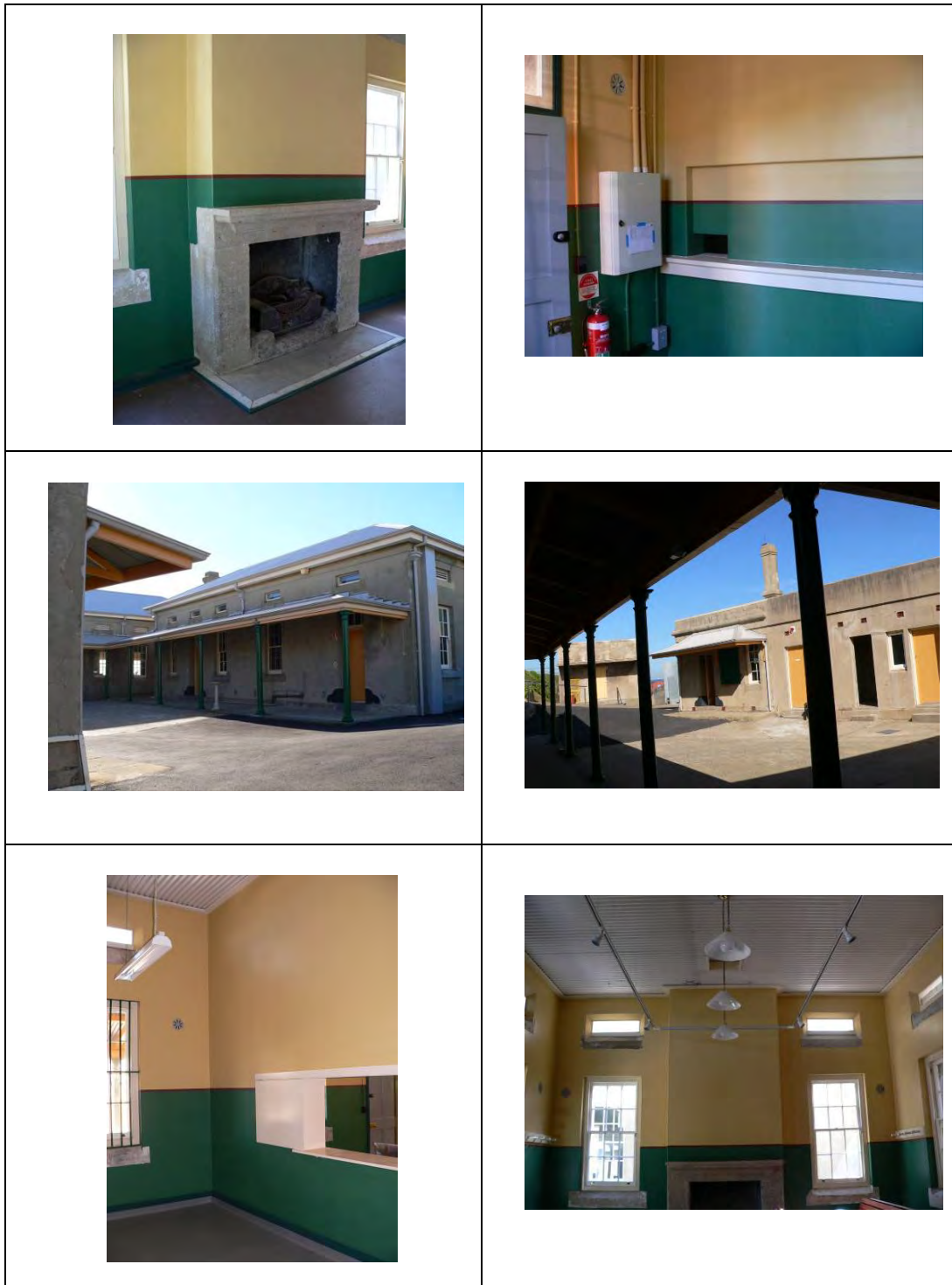


**Figure 4.14**  
**The tunnels**



**Figure 4.15**  
**The tunnels**





**Figure 4.16**  
**Barracks Building group – Canteen and Stores B20**



**Figure 4.17**  
**Barracks Building group – Kitchen Block B22**



*Figure 4.18*  
**Barracks Building group - Barracks B21**



**Figure 4.19**  
**Buildings – Commandant's Cottage, B23**





**Figure 4.20**  
**Driveway, and Artillery Store**



**Figure 4.21**  
**Buildings – Ancillary**

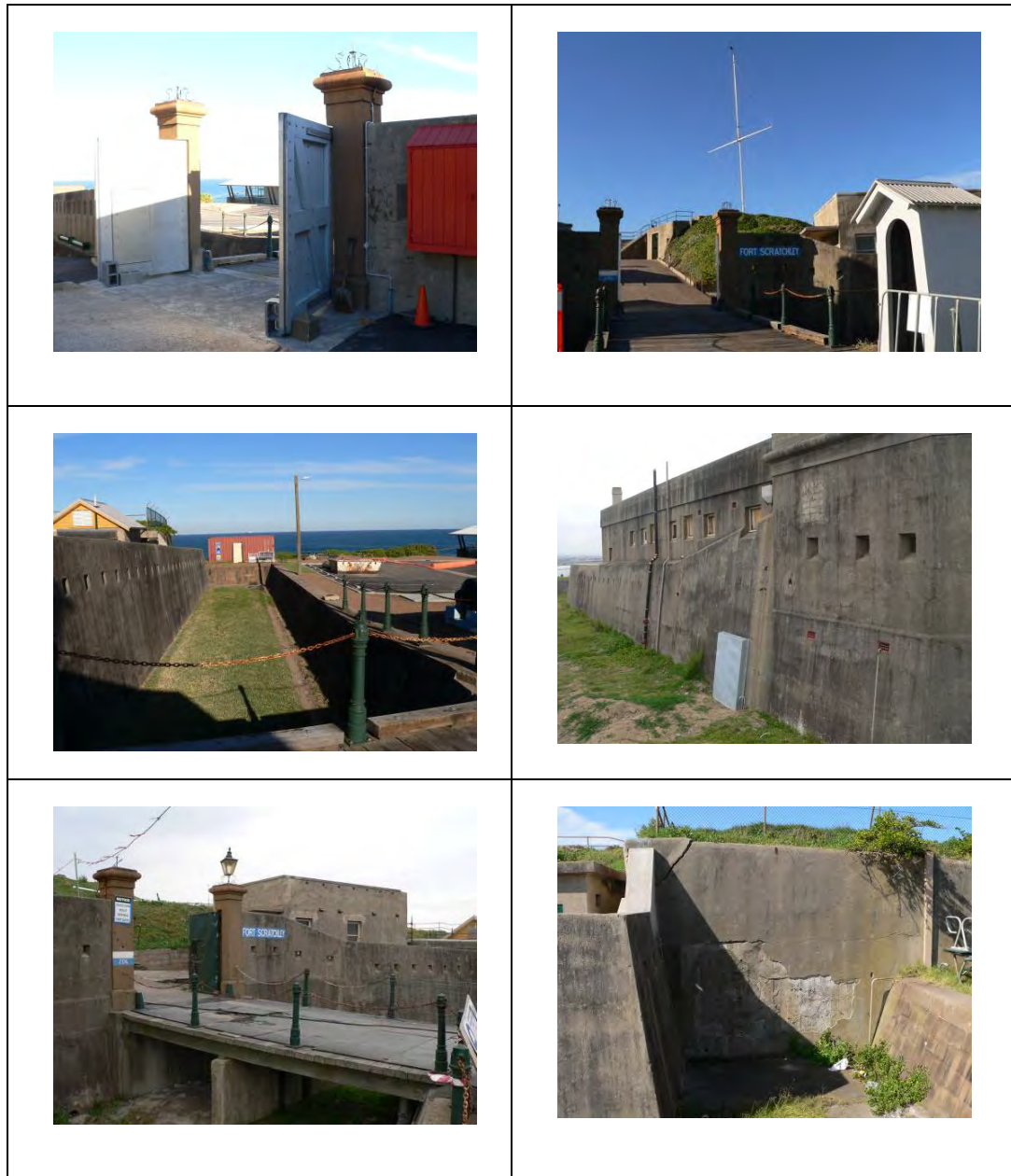


**Figure 4.22**  
**Buildings – Ancillary**

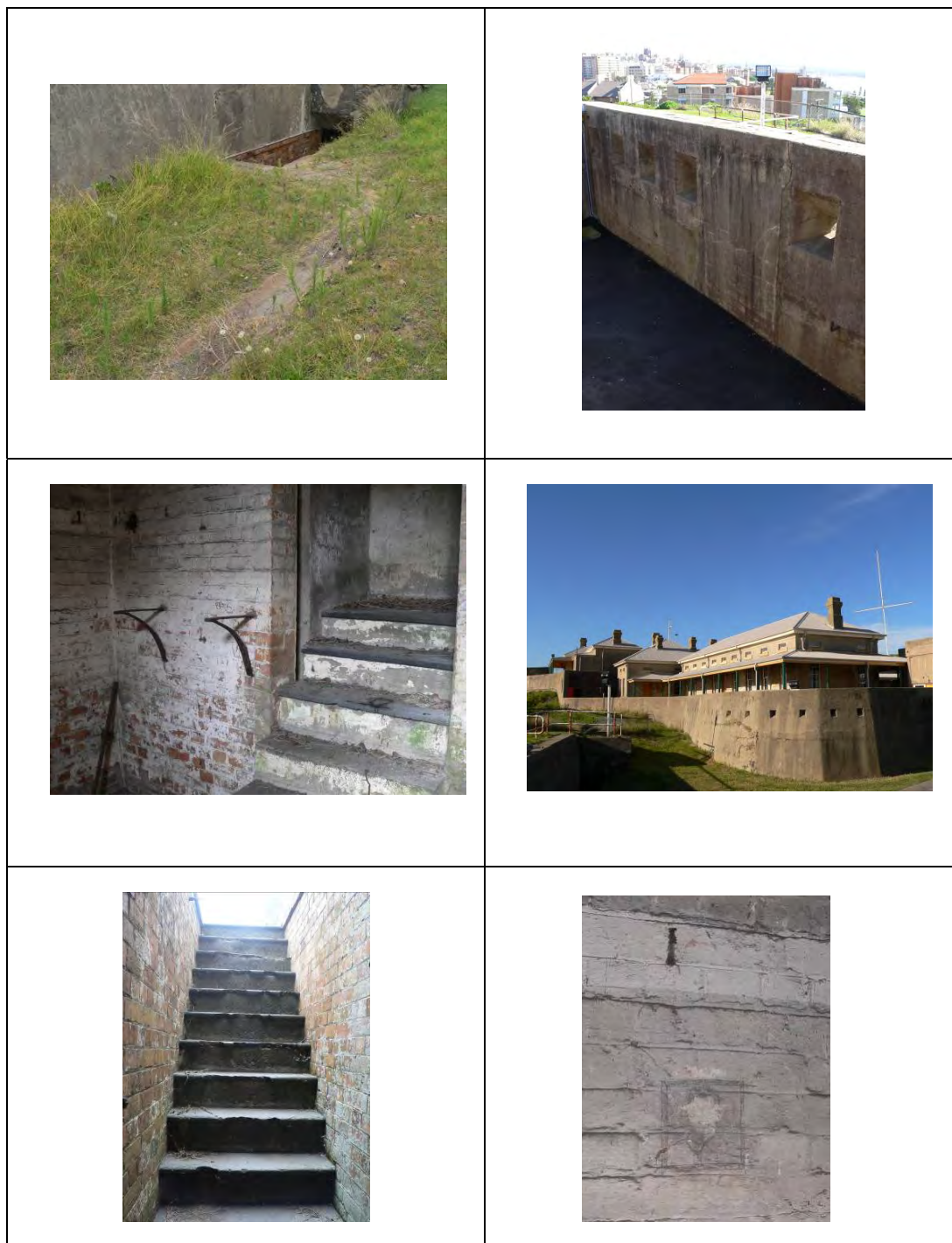




**Figure 4.23**  
**Buildings – Ancillary**



**Figure 4.24**  
**Dry Ditch, Bridge and Gates**



**Figure 4.25**  
**Mines observation post**





**Figure 4.26**  
**Outer Fort precinct**



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## **PART 5: BACKGROUND TO SIGNIFICANCE: COMPARATIVE ANALYSIS**

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### **5.1 BACKGROUND**

The process of comparative analysis provides the grounds for assessment of the site, in determining relative heritage values of Fort Scratchley with similar sites. This analysis provides a substantive basis for assessing levels of heritage significance in the context of coastal batteries and other defence installations throughout Australia.

This comparative analysis attempts to place the Fort Scratchley site in a state and national context, as well as identifying the continuing tradition of British military planning that has been used as a basis for the planning of military defences throughout the British colonies. It also looks at comparative examples of coastal fort complexes and similar defence installations in Australia, either contemporary with Fort Scratchley, or with similar functions or physical form.

### **5.2 FORT SCRATCHLEY METHOD FOR COMPARISON**

#### **Comparisons and Relationships with British Forts**

A comparative analysis of Nineteenth century fortifications in Australia will involve reference to their British origins. This comparative analysis will only discuss coastal defence heritage sites in New South Wales and Victoria. It is recognised that the planning of Australian colonial fortifications borrowed from British and European military design principles, of which Fort Nelson (1860s) in Portsmouth UK is the most intact example. A dry ditch surrounds the fort, built not so much in a manner to prevent approach, but to expose a potential attacker to defensive fire from the loopholes in the wall. Fort Nelson also has an extensive network of tunnels similar to those at Fort Scratchley, which provided safety for the gunners as they reloaded and serviced the artillery.

The nineteenth century saw many conflicts in which the designs and hardware of warfare were tested and either discarded, or copied, depending on their success. The Napoleonic wars started the century, leading to the greater use of gun casemates and caponiers (bomb-proof enclosures). Similarly, the association of submarine (or torpedo) mining with coastal forts was first proven against the French/British/Ottoman forces by the Russians during the Crimean Wars (1853-56) at the Kronstadt forts (Saunders 1989, 168).

On 18 December 1876, the Governor of NSW telegraphed a request to the Home Secretary of State, on behalf of several Australian Colonial Governments, for the loan of an Imperial officer to report and advise upon forts and defences. Victoria, Queensland, and South Australia later became involved and agreed to share costs.

William Jervois who came to prominence as a military expert during the 1850s, was selected and arrived in Australia in early 1877 accompanied by Lieutenant-Colonel Peter Scratchley R.E. Their report resulted in the establishment of permanent coastal defences in Newcastle, later to become known as Fort Scratchley. The rapid advances in military technology and ordnance in the second half of the Nineteenth century and into the Twentieth century determined the substantial alterations to Fort Scratchley in the 1890s and the 1930s.

Fort Scratchley is one of the few Australian sites that continued to be manned and to be militarily redeveloped. The site still provides evidence of this evolution.



Fort Nelson layout (Royal Armouries 2001, 17)

## Method for Comparison

For this comparative analysis similar coastal batteries will be described and examined with respect to the following attributes:

- **History**
- **Ordnance and technology**
- **Structures**
- **Military features**
- **Associations with eminent persons**
- **Topography and public access.**

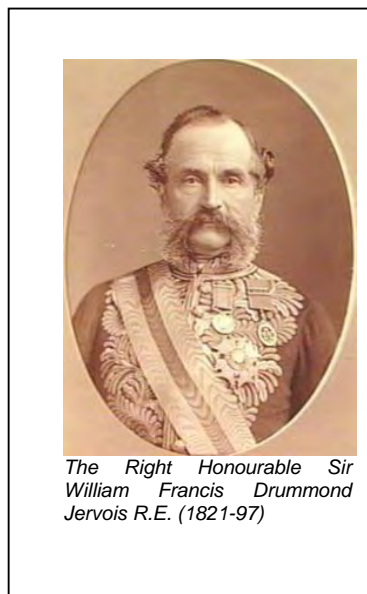
These headings allow comparison of those common and distinctive attributes for coastal Nineteenth century forts and can relate closely to criteria later employed for assessing heritage significance.

## Sydney Harbour forts (c19th)

### History

The major Nineteenth century defences planned for Newcastle had a similar origin to those planned for Sydney Harbour, as they either originated, or were largely modified, as a result of a review of coastal defences in NSW by William Jervois. As distinct from most other forts in this comparative analysis, the Sydney forts have been managed by the same government and military authorities until recent times (c1970s).

In the period 1800-1830, three coastal batteries were developed immediately around Sydney Cove: Fort Phillip on the site of today's Sydney Observatory, Fort Macquarie at the site of today's Opera House and Dawes Point, now under the southern approaches to the Harbour Bridge; and a lone, distant battery was erected on Middle Head in 1801.



*The Right Honourable Sir  
William Francis Drummond  
Jervois R.E. (1821-97)*

Wider defence sites around the harbour were established in the mid Nineteenth century; mainly in response to various perceived threats from Britain's enemies. Fortifications were added at an inner line of Harbour defence sites in the 1850s: Pinchgut (Fort Denison), Kirribilli Point and Bradleys Head.

In the early 1870s, a Defence Committee recommended the establishment of batteries on Middle Head, Georges Head and South Head, again strengthening the outer line of Harbour defences. These defences were designed locally by the Colonial Architect James Barnet.

A final phase of Nineteenth century construction occurred following the recommendations of the visit to Australia by British military experts, William Jervois and Peter Scratchley. In his 1877 report, Jervois recommended a total of 42 guns at 12 different batteries around Sydney Harbour, compared with 7 guns at one battery for Newcastle. The scale of resources to be applied to these coastal defences is similarly contrasting: Capital

costs of the works at Sydney Harbour were estimated at £95,000 with £25,000 for Newcastle; while a total of 2,363 defence personnel would be required to be maintained at Sydney, compared with only 80 regular artillerymen and Naval Militia at Newcastle.

Newcastle was the only other port outside Sydney that Jervois and Scratchley recommended for extensive fortifications.

### Ordnance & Technology

The early Sydney forts of the Nineteenth century were armed with muzzle loading guns (ML), similar to British naval guns.

The rapid technological developments in ordnance in the Nineteenth century at Sydney Harbour coastal defence sites is demonstrated by the fortifications at Middle Head, which show the many layers of defence at this site (Browning, 2005).

The greatest period of activity in revision of Nineteenth century defence came in response to the 1877 Review by Jervois & Scratchley. According to historian, Browning, “Their recommendations were accepted and a number of forts were constructed as a result and modifications made to existing forts. In essence, they recommended the use of the biggest guns possible.” (Browning 2005, 5)

This practice of changing gun emplacements around the Harbour forts in the last decades of the Nineteenth century was considered necessary to improve coastal firepower to meet the technological advances and increasing scale of naval firepower.

The Sydney Harbour forts on the outer line of defence continued to be updated until 1907 when some of the batteries were reconstructed for 6-inch Mark VII BL guns, but “...by 1911 the armament of the Sydney coast defences had been drastically reduced, and consisted of only twenty guns mounted in six locations. The major project pre-WWII was the Fortification of North Head.” (DECC 2005, 167).

The six-inch gun batteries remaining at Middle Head and Georges Heights were prepared for use in a close defence role during WW2 (Harvey 1991).

### **Structures**

As will be noted from the descriptions of the Harbour forts above, most of the guns in the Sydney Harbour fortifications were emplaced in open pits, otherwise known as *en barbette*. This was because the favourable nature of the Harbour surrounds allowed the guns to be situated well above the firing level of any attacking naval gun.

The alternative to this open style of emplacement was the enclosed fortress, used where required gun positions were exposed to attacking naval gunfire. There are only two locations in the Sydney Harbour defences where the guns were enclosed: Fort Denison and the ‘Beehive’ batteries on Georges Head.

Fort Denison was designed in 1862 to include a ‘Martello Tower’ to protect the ordnance. This rounded sandstone structure has a protected flank for accommodation and amenities. In comparison / contrast, the 1871 lower or ‘beehive’ casemates and the associated 1886 upper, or armoured casemates of Georges Head quarried into the raw sandstone at the base of the harbourside cliff of the headland, The casemated batteries at Georges Head are unique in the Sydney area and feature a structure of excavated stone and a ‘beehive’ construction of brickwork enclosing the guns.

### **Military Features**

A significant adjunct to coastal defences in Sydney Harbour, which were strategically designed into the layout of the forts, were the submarine mines / torpedo defence system, which was comprised of cables / mines laid across the entrance to the harbour in the vicinity of Sow and Pigs Reef. This feature had its immediate counterpart in Newcastle in the submarine mines laid across the Port entrance under the Fort, as recommended in Jervois’s 1877 report. Features of these installations in Sydney still exist at Green Point and Obelisk Point.

### **Associations with eminent persons**

In common with Fort Scratchley, the Sydney Harbour forts and Bare Island are associated with James Barnet, who as Colonial Architect in the period 1865 – 1891, was responsible for designs and works of all defence works in the colony of NSW.

### Topography and Public Access

Middle Head and Georges Heights are sited in spectacular locations with panoramic views over the harbour. The link with the city is more distant than at Fort Scratchley and in Sydney, the formerly barren landscape of the fort sites located in Sydney Harbour National Park is progressively dominated by the encroachment of the surrounding native bushland. As is the case in Newcastle public access is readily available, however there is no public transport in the vicinity.

### Port Phillip Bay Forts and Fort Queenscliff, Victoria

In a similar manner to the comparison provided by the Sydney Harbour Forts, the defences of Port Phillip Bay make an interesting comparison with Fort Scratchley in respect of their scale and military engineering features. Of all the remaining Port Phillip Bay forts, Fort Queenscliff is the most important, being constructed as the main command and resource centre, the most historic, and the best preserved. It functions today as the showplace of Victorian coastal fortifications with a museum open to the public. It makes an appropriate subject for comparison with Fort Scratchley.



: *Fort Queenscliff* – Postcard, showing; Black Lighthouse (1863) and octagonal Signal Station (1888), Keep and Walls (1883), and 8 inch Disappearing Gun (1885) in gun position B1.

### History

In 1860 a battery was established at Shortland Bluff 57 km from Melbourne, the site of Fort Queenscliff. Further recommendations proposed another four batteries at the entrance to the Port Phillip Bay. Hobson's Bay, the inner entrance to Melbourne, was also a point of discussion and eleven sites were recommended around this area.

The association of Peter Scratchley with southern Australian fortifications begins in 1860, when the Victorian Government applied to the British Government for the services of an officer of the Royal Engineers to superintend the erection of defences. Captain Peter Scratchley was appointed and advised the provision of batteries in Hobson's Bay and at the Heads (Scratchley 1860). Scratchley completed a 4 year term of duty in the Victorian Colony advising on defences, and, most importantly, was instrumental in establishing the Victorian Volunteer brigades (O'Brien, 2005).

In response to the Russian threat developing in the 1870s, Victoria was one of the first colonies to agree with the proposal put forward by the NSW Parliament to engage expert advice for the defence of their colonies (LC of NSW 1876, 948). As a result, in 1877 Jervis and Scratchley were commissioned and they prepared reports and designed a defensive scheme. Coastal fortifications at Port Phillip Heads were established between 1879 and 1886. Major forts were located at Queenscliff, Point Nepean, Swan Island and in the South Channel.



Fort Queenscliff was the most important of these defences and it was the command centre of the system given its location and accessibility to Melbourne. By 1886 the defence system was complete. As at Fort Scratchley, new and improved guns were introduced over time. These guns came with increased firing ranges which resulted in the closure of some other forts. By 1909 only Fort Queenscliff and Fort Nepean were manned. During this time Port Phillip had achieved status as the most heavily guarded port in the British Empire.

The Fort ceased to be a coastal defence installation by 1946, when it became the home of the Army's Staff College and was adapted for military service in other roles.

Today, Fort Queenscliff remains a popular tourist attraction, accommodating the Fort Queenscliff Museum, with its future made even more secure due to the announcement in 2000 of a continuing defence related role as a Soldier Career Management Agency on site.

A museum was established at Fort Queenscliff in 1982 to show the significance of the Fort in the local, state and national context. Considerable restoration has been accomplished in recent years, including the recovery and refurbishment of a range of representative guns and the restoration of historic buildings. An 8 inch HP BL disappearing gun is mounted for display.

An archival centre provides a facility for historical research, while guided tours provide a means for interpretation of the place and accessibility by the public.

### **Ordnance & Technology**

The 1860 vintage fort defences were recommended for upgrading in 1877 by Jervois and Scratchley. The guns at Fort Queenscliff and its integrated coastal forts were updated during the 1880s in accordance with the new technologies and in military engineering that had rapidly become available.

As for Fort Scratchley, Fort Queenscliff, as well as the other Bay forts, was updated with the latest ordnance technology: "The Fort contained eight different types of gun over the 1863-1942 period." (Museum 1994, 13). The pattern of modifications was also similar to Fort Scratchley, including the installation of 6 inch HP BL disappearing guns in late 1880s, 9.2 inch BL guns in the early 1890s and, from the turn of the century, six inch Mk V and later Mk VII coastal guns.

### **Structures**

Most of the fortifications guarding the entrance to Port Phillip Bay are at a relatively low level, compared to Fort Scratchley, or the Sydney Harbour forts, so they do not have the advantage of height over an approaching enemy. As a result, they are built to maintain a low profile with minimum obvious fortress elements that can identify gun positions.

In comparing Fort Queenscliff to Fort Scratchley, it is important to note the location of Fort Queenscliff. Fort Queenscliff is located on the outskirts of the village of Queenscliff. Its history, operation and, possibly even its unique design features are related to this close association with the Queenscliff community. Fort Scratchley is also located close to the city centre of Newcastle, and has always had close association with the local community.

Fort Queenscliff has both landward and seaward defence structures. The most obvious and iconic feature of these is the Keep; built in 1882-4 with the traditional fortress embellishments of crenellated tower, gorge (dry moat), complete loop-holed wall and, uniquely, caponiers (projections which allow enfilade fire along the outside of the front wall). It is these obvious, visible classical design elements which, like those at Fort Scratchley, readily identify and attract the public interest in the place as a "fort".

### **Military Features**

Like Fort Scratchley, Fort Queenscliff has a range of magazines for protection of ammunition and tunnels allowing the guns to be serviced under fire. Two former gun positions have been roofed over to form magazines. There are tunnel and gun positions to defend the gorge (a “sally port”) while other positions allow auxiliary guns to fire at low angles of depression, not covered by the main guns. Adjacent to each main gun position is an underground magazine to store ammunition. Brass voice tubes still exist. These were used for communicating reloading instructions to the magazines below. The shells and cartridges were raised to the gun positions through multiple vertical shafts, using a block and tackle system.

The magazines are of classical Nineteenth century style, and share many features with Fort Scratchley, including the divided design separated by lamp passage features that the British adopted to minimize risk of explosion. Sealed recesses for the oil lamps are built into the magazine walls, and the passages have floor coverings, wood & bitumen to reduce sparks.

### **Association with Eminent Persons**

In the manner of other Australian coastal forts, the Port Phillip Bay forts owe much to their association and development with the eminent British military engineer Jervois, but in the case of Victoria, more so with Sir Peter Scratchley, due to his earlier 4-year posting in 1860 as defence advisor and engineer (O'Brien 2008)

Fort Queenscliff has had strong and enduring relationships with the Australian Armed forces. The fortifications were first manned by the Queenscliff Volunteer Infantry and Artillery Corps, formed in 1859. Since 1883 the Fort has been manned continuously by the regular army. This is a distinct advantage for this Fort, as few other coastal fortifications, including Fort Scratchley, have retained the presence of the Australian Defence Forces.

### **Topography and Public Access**

Fort Queenscliff retains a “military aesthetic” with minimal intrusive, interfering or unsafe embellishments, well-controlled vegetation, and open grassed areas. On a site of 6.7 hectares, located on Shortland Bluff, the Fort has views over “The Heads” and “The Rip” of the entrance to the Bay.

## **Bare Island Fort, Botany Bay, New South Wales**

Many elements of defence technology and strategic planning developed in the massive British forts of the UK, are reflected here. The story of Bare Island, Botany Bay is useful as a comparison with Fort Scratchley because of similar origins, relative scale and, of course, its proximity to the entrance to a major port.

### **History**

Bare Island had very early beginnings, being identified in the journals of Captain Cook as ‘a small bare island’, and later visited by Sir Joseph Banks in 1770 (Gojak 1997, 8). No major use, even for defence application, was made of the Island until 1877, when like Fort Scratchley, Bare Island was proposed as one of the locations nominated for coastal fortifications in the report on Coastal Defences by Jervois (Jervois 1877).

Construction began in 1881 on the fortification of Bare Island. Together with Fort Scratchley, it was one of the first major structures to be built of mass concrete with only minimal iron reinforcing, in Australia. It was designed to be self-contained with barracks

and materials stores to withstand a siege. The construction of the fort was improperly supervised with the contractor failing to comply with requirements for materials and construction. The resulting scandal led to the first Royal Commission in Australia and disgrace for Colonial Architect, James Barnet.

In 1903 Bare Island was transferred from State to Commonwealth ownership with only the six inch gun operational and by 1908 it had ceased to serve any defence purpose.

During World War II both the Henry Head and Cape Banks batteries at Bare Island were brought back into military service with additional buildings and gun emplacements being constructed. Bare Island was briefly re-used as a fort during 1948. Most of the structures at Cape Banks were removed by the military between 1953 and 1962, however a number of houses, and an underground bunker remain.

Bare Island was decommissioned in 1911. In 1912 part of the fort was converted into a home for war veterans.

The war veterans continued to occupy the fort until 1963, following which it became a local and natural history museum operated by the Randwick Historical Society until 1976 when the museum was closed and the artefacts removed.

On 1<sup>st</sup> October 1967 Bare Island became one of the first historic sites in NSW under the management of the newly created National Parks and Wildlife Service and was incorporated into Botany Bay National Park in 1984.

### **Ordnance and Technology**

The five major guns installed at Bare Island were:

- An RML 10 inch Mk II of 18 tons installed on an iron, sliding dwarf carriage in the central casemate (No.3 gun position). Remarkably, the casemate was of latest design; being based on 9 inch thick iron plate, riveted across a roofed vault and protecting the front around the embrasure.
- Two RML 9 inch MkV guns of 12 tons on iron sliding dwarf carriages with D pivot, mounted 'en barbette' immediately flanking the main gun on either side (gun positions 2 & 4).
- Two RML 80 Pounder MkI guns on iron 80/68 Pounder Parapet carriages, 'en barbette', at the rear of each flank (gun positions 1 & 5).

The military planning principle was for a major gun, or battery to be emplaced at the centre of a fortification using the most up-to-date technology. It needed to be well protected from fire from a number of warships, ie, be emplaced inside a casemate, or be of the 'disappearing type'. Importantly, other guns would protect the central battery; usually flanking batteries with open embrasures to the sides. "The basis of the Bare Island design, was a symmetrical crescent, with the heaviest gun in the centre, which faced the likely line of attack".<sup>51</sup>

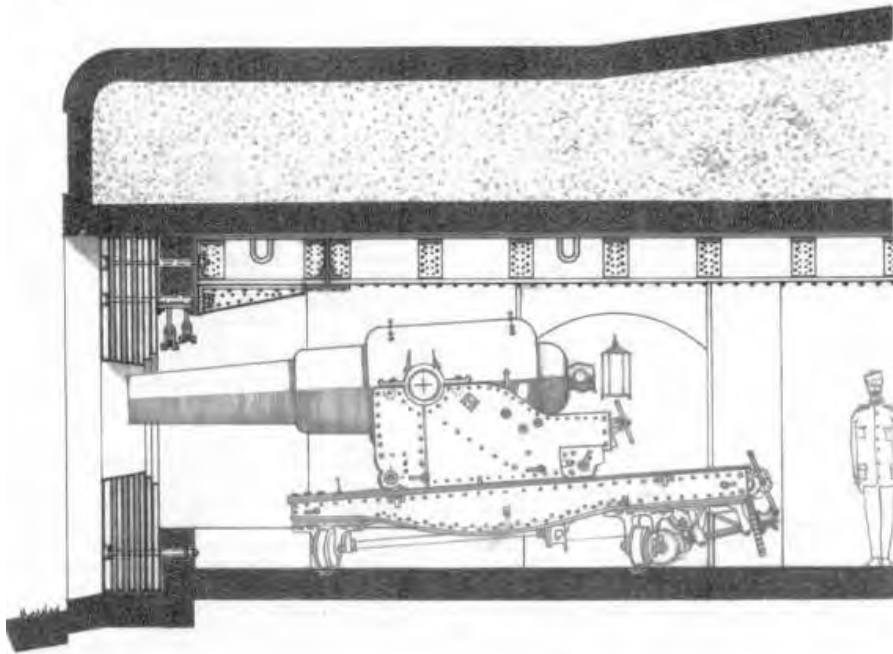
Fort Scratchley, also shows elements of this design, especially at the height of its Nineteenth century armament, with an 8 inch Disappearing Gun as the central gun, flanked by lesser guns. However, the symmetry is not as obvious as at Bare Island.

One of the new generation 'disappearing guns', an HPBL 6 inch MKV, ordered by Colonel Scratchley in 1886, was finally installed into gun position 2, flanking the casemated 10 inch gun on the southern side. This was the only major ordnance upgrade made to the Bare Island's armaments during its coastal defence role.

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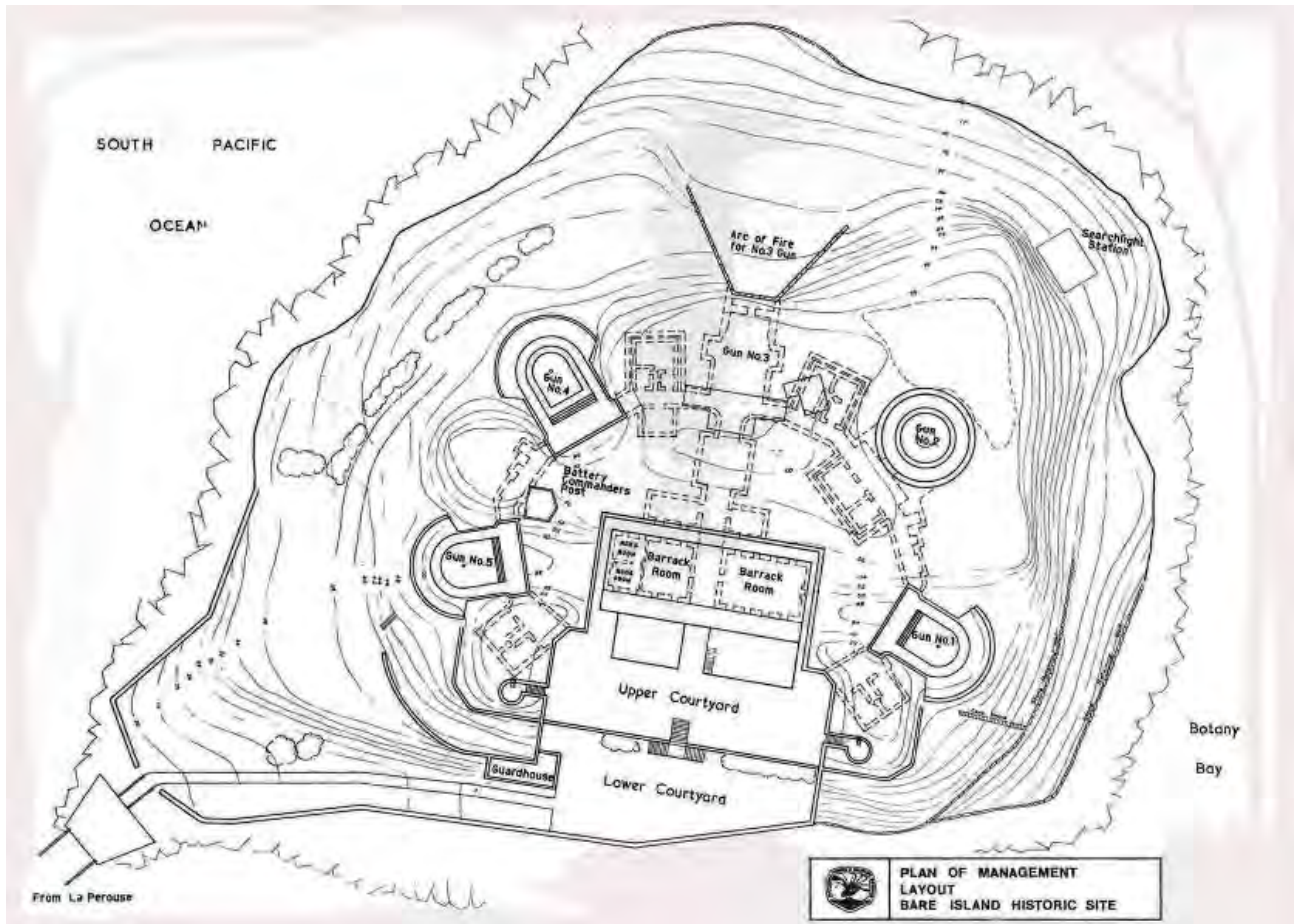
<sup>51</sup> Gojak 1996

The design principle which characterises Bare Island and correspondingly became a feature of Fort Scratchley was the installation of a fourth and larger 8 inch disappearing gun, located in a central position. This main gun was flanked, and protected by batteries of guns to right and left of the main gun. The batteries form a symmetrical crescent, or delta shape, facing the expected line of attack. Magazines and other services are located behind and protected on the landward side by walls, wet or dry ditch and barracks building. This symmetrical crescent arrangement was exhibited to a lesser extent at Fort Lytton (Brisbane), which being next to the river, was protected by a moat.



“10-inch 18-ton RML – Armoured Casemate”  
(Oppenheim 2004, 120)

Fort Scratchley Historic Site , Newcastle  
– Heritage Management Plan



*Layout of Bare Island Fort – NP&WS Plan of Management  
Diagram taken from one of the only original surviving plans of the Island's fortification system (Gojak 1997)*

### **Association with Eminent Persons**

Bare Island's association with eminent persons includes strategists Jervois and Scratchley, the Colonial Architect James Barnet, and to a lesser extent Ferdinand Rola de Wolski. This association with the latter, best relates to the Fort's constructions.

While the strategic vision for Bare Island Fort was the work of Jervois, it was Scratchley's role to detail the designs, specify and inspect the works. He was supported by a civil engineer, for the Colonial Architect's office, Gustavus Morell, who prepared the construction drawings from Scratchley's designs and work started in 1881 (Gojak 1997, 15).

The construction became a lengthy story of incompetent workmanship, and inadequate supervision, reflecting poorly on both the contractor and the Colonial Architect's office. After years of delay, evidence of water ingress in the tunnels and other defects, a British coastal defence expert Lieutenant-Colonel de Wolski was brought to the project in 1889. His investigations confirmed irresponsible contract procedures being employed. Following his formal submission, the government took the coastal defence responsibilities out of the Colonial Architect's hands and a Royal Commission of Enquiry was set up to investigate the scandal and report in 1890.

The Royal Commission found that Barnet was responsible for mismanagement and insubordination, and recommended that the responsible members of his staff be retired or dismissed. The contractor was required to refund over \$6,000 and was barred from any further government contracts. Barnet was officially censured and subsequently retired in June 1890. (Newton 2007, 4). For Sydney's famed Colonial Architect, "...this was an ignominious end to a distinguished career, marked by many of Sydney's best known and most magnificent late Nineteenth century buildings" (Gojak 1997, p29)

### **Topography and Public Access**

Bare Island had its 'military aesthetic' preserved and relatively undeveloped, as a home for veterans. Since 1967 the site has been under the control of National Parks and Wildlife Service. The coastal climate has also kept the island relatively free of vegetation regrowth, so that the Fort's defensive role, views of the headlands and strategic position will assist the visitor to appreciate its original topography.

### **Fort Scratchley, New South Wales**

The following section provides a comparison of the attributes of Fort Scratchley with the other locations identified by this Comparative Analysis. It makes these comparisons under the same headings used to describe the previous fort examples.

### **History**

The site has figured in the very early settlement history of the first colony. The location of the Hunter River (Nobbys Is.) received a brief mention in Cook's Journal, and discoverer Shortland's map of the river entrance first describes the headland on which Fort Scratchley stands (Coal River 2008). These early historical associations are also significant in the case of the Sydney Harbour Forts and Bare Island which, in 1770, was noted by Cook and visited by Sir Joseph Banks. The headland was significant for the additional reason that it was the site of the first extraction of coal in Australia.

The headland's role as a maritime signalling station from 1815-1914 adds to the cultural foundation of the place. The station on Signal Hill was the second coastal signal station after South Head, Sydney, on the east coast of Australia, its function being taken over by the lighthouse on nearby Nobbys in 1914.

Most significantly, Fort Scratchley is an excellent representative example of a classical Nineteenth century coastal fortification. Its construction resulted from the 1877 Review prepared by Jervois and implemented by Scratchley. In his design of the Fort, Jervois was given a 'clean slate' as there were no previous permanent fortification structures. The result is a fortress structure that is able to exhibit clearly many of the latest British military engineering principles developed up to the 1870/1880 period. The Fort is not unique in claiming this, however, as Bare Island Fort, Fort Lytton (Brisbane), Fort Glanville (South Australia) and some of the 1880s Port Phillip Bay forts also exhibit elements of military engineering favoured by Jervois.

Fort Scratchley has the distinction of being 'The only Australian fort to have fired in action at an enemy surface target'. This claim arose from the attack mounted upon the Port of Newcastle by Japanese Submarine I21 on 8<sup>th</sup> June 1942 when the guns of Fort Scratchley fired 4 rounds of return fire at the submarine.

In comparison, the coastal defence forts of other southern Australia cities saw action only in the form of warning shots for identification of shipping on several occasions.

### **Dedication of Fort Scratchley**

The Armed Forces vacated Fort Scratchley in 1972. From its first use, known as 'Fort Fiddlesticks' in the 1820s, this represents a service length at this place of 143-152 years. Importantly for Fort Scratchley and in honour of this long service and the Fort's contribution to the defence of Australia, Fort Scratchley was "dedicated to all the serving and ex-service men and women of Australia" in a ceremony conducted by the Prime Minister in 2002. This made the place relevant to anyone who has donned an Australian uniform. No other fort in Australia has received this distinction.

In a close comparison, Fort Queenscliff, billed as 'Victoria's Premier Coastal Fortress' began with the erection of temporary earthworks in 1861. So while it is still occupied by the army, it has seen a defence role on the site for 146 years.

Fort Scratchley was occupied by two museum societies (Military Museum and Maritime Museum) from 1978 to 2003. These tenancies had been moderately successful in managing the site for public use and access, however little maintenance was carried out during this period, unlike Fort Queenscliff during the same period.

Refer also to the more detailed history, Section 3.2 of this Heritage Management Plan.

### **Ordnance and Technology**

Fort Scratchley is a rare example of a fort battery complex which demonstrates the evolving technology of coastal defence from 1880 until the end of WW2.

Major ordnance development is demonstrated by the 'layers' of construction evident in various gun positions. The structures which remain are physical evidence of the development of armaments between 1882 and 1945. Changes were made to either install a new generation of ordnance, or to protect the gun crew under changing conditions. Bare



Island Fort, while comparable in many ways to Fort Scratchley, was used as an active fort from 1883 to 1902, and only had one of its original guns changed in its much shorter defence career.

Structural modifications are also evident in the tunnels and magazines, made to accommodate new ammunition, or to service the new guns when they were changed. Changes in the lighting systems of the tunnels, from candle lamps of the Nineteenth century to electric systems of WW II demonstrate technical developments over half a century of use.

The most significant example of structural modification is in the roofing of the open tunnels serving the three guns “en barbette” when, in 1889, those three positions were updated for ‘disappearing’ guns. This modification uniquely provided the Fort with fully enclosed fighting areas, and must have given the gun crews much more confidence. Apart from two gun pits at Fort Queenscliff that were roofed over to form magazines, there is little evidence in other Australian forts of such major structural rearrangements over a long period.

### Structures

The major flanking batteries at Fort Scratchley combine both ‘en barbette’ (open) gun pits to seaward and the outstanding ‘casemates’ (enclosed gun positions) protecting the river entrance. Bare Island Fort is the only other fort in Australia able to demonstrate these two styles of gun emplacement on the one site. It differs from Fort Scratchley however, in its symmetry with its two flanking batteries ‘en barbette’ protecting the main gun mounted in an armoured casemate.

The gallery of three casemates at Fort Scratchley is representative of the prevailing, late Nineteenth century style of battery construction in the larger British forts, such as Fort Nelson, but is only reflected in two of the other Sydney forts: the Upper and Lower Batteries at Georges Head.

The 1880s designed tunnel system at Fort Scratchley is of rare quality and a part of the fort that is most highly valued by its local community. The system is extensive and, except for the 1889 roofing of the western passages is quite original. The layout is innovative as the tunnels always run downhill in the direction of loading ammunition, either into the central magazines, or out of them to the deep shell lifts. This feature is not exhibited so clearly in any other Australian fort.

Walls of the original fortifications built at Fort Scratchley in 1882 were constructed in mass concrete. Modifications were made in 1889 to accommodate the ‘disappearing guns’ and in this instance, concrete across the roof of the tunnels was reinforced with sections of iron railway line of ‘bull-head’ profile. Similar construction was used at Bare Island Fort, which was ‘mostly completed’ by 1886. Both forts were very early examples of the use of reinforced concrete in Australia.

The rampart walls of Fort Scratchley, which enhance its external appeal, are built of concrete. The lower walls around Fort Drive were constructed 1885 using mass concrete. The upper, sloping ramparts were constructed of reinforced concrete in 1914 as batter protection. The upper walls and sloping top surface of the Fort is representative of the British ‘design factor’ that a ‘glacis parapet’ was found to ‘..divert the incoming shells over the works themselves.’<sup>52</sup> Fort Scratchley is not alone in displaying this quality; the gun batteries on Middle Head, Sydney Harbour were constructed and modified by Jervois and Scratchley on this principle.<sup>53</sup>

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<sup>52</sup> Saunders 1989, 1995

<sup>53</sup> NP&WS 2002

The above-ground buildings at Fort Scratchley are also representative of British military planning principles, by their placement at the rear wall below expected enemy fire. This location also places garrisoned troops in a position to readily man defensive positions at the rear walls against attack from the landward side. The Fort buildings remain largely intact and the planning arrangement of the complex is generally unchanged since the 1880s.

By comparison: Fort Queenscliff contains a large number of different structures of original condition and great heritage value; the support buildings for Rottnest Island, WA, are located in a central area at Kingstown complete with stylish barracks surrounding a large parade ground; Fort Lytton has only small associated buildings within the Fort and used the old quarantine station premises outside; and the Leighton Battery placed its associated barracks and support facilities well to the rear of the fort. Again, it is Bare Island that shows similarity to Fort Scratchley, with a dense group of support buildings and small courtyard situated inside the walls at the rear of the fortress. Moreover, it shares the same designer, Barnett, who was able to endow both locations with a consistent building design in harmony with their military settings.

Fort Scratchley's associated buildings, being mostly protected inside the fort walls are highly representative of the various functions required to support a coastal battery. There are barracks, Commandant's Cottage with servant quarters, offices, kitchen, ablution blocks, guard house, searchlight emplacement, generator room and quite uniquely, an armoured laboratory used for preparing gun cartridges. Bare Island, is the only other comparable example of a complete self contained battery and barracks complex in Australia, which could provide such a potential for interpretation.

### **Military Features**

**Shell Lifts:** A very rare and significant engineering feature of Fort Scratchley is the mechanism of three iron and chain shell lifts servicing the eastern gun positions from the lowest ends of the tunnels. They are of unusually fine quality and exhibit clever engineering. Believed to date from 1882, they pre-date the automatic shell lifts in WW II gun emplacements for 9.2 inch guns at North Fort and Rottnest Island. Similar shell lifts appear not to have been fitted to any other Nineteenth century Australian fort.

**Tunnel Lighting:** The tunnel lighting system at Fort Scratchley is of particular quality and significance; even on a world scale. The main feature of significance is the finely crafted brass frames with protective mesh, which were fitted to main passageways throughout the tunnels. This compares only with the better quality lamp recesses at Fort Nelson, UK or some of the magazine lamp recesses at Fort Queenscliff. The candle-operated passage lamps that were originally installed have now been identified and six 'Wall Lamps' reconstructed.

**Casemate Lighting:** Another rare asset of the Fort has been the world-class reconstruction of the 'Tremletts Pattern Fighting Lamp' which is solidly designed and mounted to resist breakage in the casemates. Although this was the standard lamp for casemates, only Fort Scratchley in Australia has them. The restoration of a further 20, or so, lamp recesses, with lamps fitted to simulate the original ambiance of the tunnels presents a future opportunity for a very unique interpretive experience.

**Gun Control Systems:** Gun control systems are a feature often lost, or misunderstood in the conservation of forts. At Fort Scratchley, it is still possible to interpret changes made in the systems used for directing fire of a gun battery. Evidence remains of Depression Range Finders of the 1880s; the extended Battery Observation Post of WWI - II; and even of the late WW II radar directing station at nearby Shepherds Hill. Such evidence also

exists amongst the many Sydney fortifications, but is not so conveniently able to be interpreted at one location.

**Battery Observation Post:** This building is intact and is a dominant structure of the upper parade ground, west of Gun 2. The operations carried out inside other Battery Observation Posts are interpreted in reconstructed Battery Observation Posts at the Leighton Battery, and at Fort Tairaroa, N.Z. Fort Scratchley has a unique opportunity to do the same within an existing structure. The BOP is one of the most intact in any Australian fort. Fort Scratchley is unique in retaining the essential elements of the battery complex, including guns, searchlight station, signal mast, all of which were controlled from the BOP. It is more complete and intact than two similar BOP's located at another nearby coastal battery, North Fort on North Head in Sydney.

**Mines Firing Station:** The mines firing station attached directly to Fort Scratchley is a rare element not often obvious in Australia forts. A mines firing station was constructed at Fort Scratchley to control the mines laid as part of the Jervois master plan, across the entrance to the port of Newcastle. It represents an excellent example of a Nineteenth century defence principle that submarine mines and obstructions placed in a channel are usually used in close conjunction with nearby forts and are often regarded as the major defensive element. In some instances, as in the casemated Upper and Lower Batteries at Georges Head, the guns are there as an adjunct and protection for the underwater defences. A comparable example of the joint use of mines is that seen at Fort Lytton where mines defending the Brisbane River were controlled from separate bunkers built within the fort area. The Fort Scratchley facility, being partially protected by the walls of the fort, has a clear view of the Cornish Boat Harbour from where the mines were laid.

### **Association with Eminent Persons**

During its construction, the Fort was known as Newcastle Fort, and it was only after Sir Peter Scratchley's death that it was renamed in his honour. The naming identifies a very close association of the Fort with this Nineteenth century British Royal Engineer who, following the principles developed by Sir William Jervois (Jervois, 1877), advised on the detailed design and construction of the Fort.

In the same manner, the Fort's reputation is greatly enhanced by its association with Jervois as strategic designer. Jervois had the reputation, at that time, of being Britain's and possibly one of the western world's greatest coastal defence experts (Saunders 1989). The Colonial Architect of NSW, James Barnet, responsible for many of the colonial buildings of which Sydney is proud, is associated with the building of Fort Scratchley. It was in his offices that the designs were prepared and the contract for works administered. Bare Island Fort also has this same distinction in designers and builders. The controversy involving Barnet during the construction of Bare Island was unrelated to Fort Scratchley. The work of the Colonial Architect at Fort Scratchley is undiminished and is of great importance.

### **Topography and Public Access**

Fort Scratchley's prominent position on a hill above the second largest city in NSW gives it enormous prominence and recognition. It provides visitors with unequalled views of Newcastle and its port from the fort buildings and ramparts, with panoramic views of the city from the western balconies. It is easily accessible, on foot from the city. The Fort is a prominent feature viewed from the city of Newcastle. The verandahs of the barracks buildings, the Commandant's Cottage, the fort walls and elevated position of the hill with the signal mast behind, are features of a city icon.

The aesthetic of the Fort to a visitor is that of a classical, almost stereotypical fortress. On approach to the Fort from seaward, its appearance is formidable and impressive. Wide rampart walls face the hillside, which is topped by signal masts, a small observation post and is edged by the outline of two guns. On a landward approach from Parnell Place, a winding road leads up a bare, grassy slope to solid walls of the Fort. Advancing further, a visitor is aware of the crenelated and loopholed walls designed for defensive fire. Finally, across the concrete walled dry ditch under the walls, a wooden ramp allows approach to a solid main gate, surrounded by high stone posts.

The approaches to the Fort retain many of their qualities which would have existed in the 1880s. The minimal vegetation, cleared for the purpose of both sighting and fire of the guns, also helped to prevent damage from fire either due to enemy action, or the burning debris from friendly fire and was a necessary characteristic of gun batteries. There are many Australian colonial forts which have lost this aesthetic: Kangaroo Bluff Battery (1884), situated across the Derwent River to protect Hobart, and the Princess Royal Battery (Albany WA) are examples of this. Unfortunately, from the viewpoint of military historians, Australian coastal fortifications under the care of national park authorities such as many of those in Sydney Harbour, tend to favour the conservation and even re-establishment of denser vegetation on areas that had been previously cleared for the operation of these military installations.

Very few of the Australian coastal fortifications can compare with the classical military aesthetic demonstrated by Fort Scratchley. Fort Queenscliff in Victoria however, also has a military aesthetic, enhanced by the fact that the Fort is still under the control of the Australian Armed Forces (Museum 1994). This fort also characterizes many of the classical design features of a fortress, especially on its landward approach.

## The Future

The above examples are iconic sites with extremely high heritage values. In all cases the locations are close to centres of population in scenic locations with potential for tourism and recreation. The sites are therefore highly desirable and under pressure for redevelopment for other purposes. The future protection of these historic military icons is dependent on recognition of the significance of these places to prevent development which undermines their heritage values.

Fort Scratchley has excellent potential as an educational and tourist attraction for the city of Newcastle, continuing the recommended theme of “A Museum of Itself” (Suters 1997). Resourcing and sustainability are key issues. These issues are addressed in the above examples by strong partnerships and use of community and volunteer groups. In relation to the latter, Fort Scratchley is supported by the Fort Scratchley Historical Society Inc., a group which has demonstrated commitment and resourcefulness throughout 27 years of association with the Fort. The Society has plans for the future that are compatible with the protection and promotion of Fort Scratchley as a heritage site. These plans include further restoration of the gun emplacements, a disappearing gun into Gun Emplacement 2 and restoration of Gun Emplacement 1 to the earliest “open pit” period. This will highlight the ‘layers’ of military heritage for which Fort Scratchley is highly valued.

## Conclusion

Overall, this comparative analysis highlights the special heritage values of Fort Scratchley and the uniqueness of this site as an example of a closed coastal fort installation of the late nineteenth century. All examples of the sites described are significant for many similar

qualities, but Fort Scratchley has outstanding significance as the most intact and comprehensive complex of British Colonial military engineering in Australia.

Factors which contribute to this assessment include the following:

- It is a complete and intact example of a closed fort with dry ditch, based on established British design principles.
- It displays the built alterations required to accommodate changing technology, providing evidence of the layering of changing and improving military technology during a comparatively long period of military deployment.
- The tunnel system retains many military features unique to this site
- It is a complete and self contained military complex with living quarters, including barracks and services for personnel.
- It has a military service record that includes firing upon the enemy.
- It is uniquely located on a high coastal flank, constructed in defence of a port and city, easily accessible to the public, close to transport in a major city centre.

Prior to the establishment of the fort, the site also has historic and cultural significance in relation to the penal settlement of Newcastle, the earliest extraction of coal in Newcastle, earlier gun emplacements and maritime functions overlooking the port.

## Summary against Comparative Sites

The following tabulation evaluates the comparative heritage values of Fort Scratchley in relation to each of the comparative sites, which are ranked according to Burra Charter values of cultural significance:

- 1 Exceptional significance**
- 2 High significance**
- 3 Moderate significance**

		<b>Georges Head</b>	<b>Fort Queenscliff</b>	<b>Bare Island</b>	<b>Fort Scratchley</b>
<b>Description</b>	Representative of C19 Fort & ongoing development	2	1	1	1
<b>Historic</b>	Establishment Dates	1871	1878	1886	1882
	Last Military presence	1911	1942(then Army Staff College)	1903	1972
<b>Historic</b>	Representative of C19 British planning and military engineering	2	2	1	1
<b>Scientific</b>	Ordnance & Technology	3	1	3	1
<b>Aesthetic</b>	Structures	1	1	1	1
<b>Scientific</b>	Tunnel System	2	2	3	1
<b>Scientific</b>	Military Features	3	2	3	1
<b>Social</b>	Association with Eminent Persons	3	2	1	1
<b>Aesthetics</b>	Topography & Public Access	1	2	3	1



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## **PART 6: ASSESSMENT OF SIGNIFICANCE**

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### **6.1 GENERAL APPROACH**

The general approach applied to the assessment of cultural heritage significance is set out in the fifth edition of *The Conservation Plan* (2000) by James Semple Kerr and relies on an understanding of:

- The fabric as evidence
- The associations of the place
- The physical qualities and relationships.

#### **Basis of Assessment**

This study uses the Criteria for the Commonwealth Heritage List and National Heritage List to evaluate the nature and degree of significance of the site as a whole and its key contributory components. The assessment also addresses the Criteria for the NSW State Heritage Register. The nature of cultural significance is assessed under four themes described in the Burra Charter as **historic, aesthetic, technical/scientific and social significance**.

The **degree** of significance takes into account the rarity or representative nature of the item or feature.

### **6.2 ASPECTS OF SIGNIFICANCE THAT ARISE OUT OF THE COMPARATIVE ANALYSIS**

The Historical Background section of this study provides a detailed outline of the origins of Signal Hill and the evolution of Fort Scratchley as an important military installation for coastal defence in NSW. The preceding section explores the origins of coastal fort development in Britain and Australia and draws a comparative analysis with selected contemporary examples of fort complexes in Australia. The relevant Burra Charter heritage values (Historic, Aesthetic, Scientific and Social Significance) are used as the basis for this comparative assessment, and are considered in terms of rarity and representativeness:

#### **Historic**

Fort Scratchley is an intact ensemble of military buildings and structures from a range of periods. Bare Island was a contemporary of Fort Scratchley and both forts had design origins in common.

The major flanking batteries at Fort Scratchley combine both 'en barbette' (open) gun pits to seaward and the outstanding 'casemates' (enclosed gun positions), protecting the river entrance. Bare Island Fort is the only other fort in Australia which demonstrates these two styles of gun emplacement on the one site. The structures at Fort Scratchley are physical evidence of the complex development of armaments and layering of development over a period of more than 83 years, unparalleled by any other comparable site including Bare Island which had a military history of only 22 years.

The complex is a fully self contained complex of military structures, including barracks, support facilities, fort battery, and services including water supply.

The establishment and design of Fort Scratchley is closely associated with the eminent military strategists, Sir William Jervois and Sir Peter Scratchley, who were also responsible for the planning of Fort Queenscliff and Bare Island. The design of the buildings is attributed to the Colonial Architect James Barnet, who was also the architect responsible for Bare Island.

The military record of Fort Scratchley includes firing on the enemy in response to an attack on the industries and the east end of Newcastle in 1942. It is the only coastal battery to have engaged the enemy in NSW history.

Irrespective of the establishment of the fort, the site also has historic and cultural significance in relation to the penal settlement of Newcastle, the earliest extraction of coal in Newcastle, earlier gun emplacements and maritime functions overlooking the port.

### **Aesthetic**

The complex has aesthetic significance for its overall planning, which is a continuation of the long standing tradition of English fort planning widely adopted in the colonies.

The barracks buildings are accomplished in design, in the Regency style fashionable in this era of Victorian architecture.

The natural location of the Fort has parallels with Bare Island, on an exposed coastal headland. The elevated position has more in common with the Georges Heights batteries overlooking Sydney Harbour.

The barren natural landscape is an important aesthetic feature of the site, and contrasts with other formerly sparse landscapes such as Georges Heights, and examples in Hobart and Albany which have become dominated by vegetation.

### **Scientific**

Military features of Fort Scratchley which were particularly innovative in technical and scientific terms in relation to the development of contemporary fort batteries during the late Nineteenth century include:

- **Shell Lifts:** A very rare and significant engineering feature of Fort Scratchley is the system of three iron and chain shell lifts servicing the eastern gun positions from the lowest ends of the tunnels.
- **Tunnel Lighting:** The tunnel lighting system at Fort Scratchley is of particular quality and significance; even on a world scale.
- **Casemate Lighting:** Another very rare asset of the Fort has been the world-class reconstruction of the 'Tremletts Pattern Fighting Lamp'.
- **Gun Control Systems:** Evidence remains of Depression Range Finders of the 1880s; the extended Battery Observation Post of WWI - II; and even of the late WW II radar directing station at nearby Shepherds Hill.
- **Battery Observation Post:** This building retains many internal features which are evidence of former range finding and other installations.
- **Mines Firing Station:** The mines firing station attached directly to Fort Scratchley is a rare element

## Social

Fort Scratchley is important to the many Defence personnel who were trained or stationed at the complex, with history and traditions extending back to 1882 for Fort Scratchley, and to the 1820s for the first garrison of 'Fort Fiddlesticks'.

Fort Queenscliff is the only comparable intact garrison with such a long history, which began with the erection of temporary earthworks in 1861. Since Fort Queenscliff is still utilised by the army, it has seen a defence role on the site for more than 146 years.

Fort Scratchley is important to the people of Newcastle as a major tourist attraction, and as a complex with major scenic and historical qualities. These qualities are shared by many if not all of the fort sites discussed in the comparative analysis.

In a ceremony conducted by the Prime Minister in 2002, Fort Scratchley was “dedicated to all the serving and ex-servicemen and women of Australia”. Fort Scratchley is understood to be the only Australian fort to be the subject of such a dedication.

In terms of the criteria for significance above, Fort Scratchley has **representativeness** and **rarity** values, as follows:

### Representativeness

The layout of the complex is typical of military planning during Australia's colonial era, reflecting the influence of English and colonial, designed by the Royal Engineers in Australia.

### Rarity

The site is rare as one of only two coastal batteries constructed on a large scale with completely closed works in Australia. Fort Scratchley and Bare Island were the only closed fortresses constructed during C19 period of development of the NSW Coastal Defence system. However, Fort Scratchley demonstrates a far greater period of development and variety of armaments up until after World War 2, as Bare Island existed as a defence facility for a comparatively short period.

Fort Scratchley is a rare example of a fort battery complex which demonstrates the evolving technology of coastal defence from 1880 until the end of WW2. The following features are evidence of this technology:

- Shell Lifts
- Tunnel lighting system
- Casemate Lighting, the world-class reconstruction of the 'Tremletts Pattern Fighting Lamp'
- Gun Control Systems, including remnants of Depression Range Finders of the 1880s and the Battery Observation Post of WWI – II.
- Mines Firing Station is a rare element not often obvious in Australia forts.

Fort Scratchley is a rare example of a small scale association of fortifications in relation to comparable sites, but demonstrates most of the significant Nineteenth century defence features in the one compact location.

## 6.3 CITATIONS AND EXISTING LISTINGS

### Current Listings

The Fort Scratchley site is currently listed by all three levels of government as follows:

The site was placed on the **Commonwealth Heritage List**, which comprises natural, Indigenous and historic heritage places owned or controlled by the Commonwealth. These include places connected to defence, communications, customs and other government activities that also reflect Australia's development as a nation. The site was previously listed on the Register of the National Estate.

**The Fort Scratchley Group** is listed on **NSW State Heritage Inventory** as item ID No 2170240, Gazettal date 8 August 2003.

**The Coal River Precinct** is listed under the NSW Heritage Act **State Heritage Register**, which includes the Fort Scratchley site, item ID no 5053900. The precinct was gazetted on 19 Dec 2003.

**The Fort Scratchley Group** is listed on **Newcastle LEP 2003, Schedule 6 – Heritage items and heritage conservation areas**, assessed as an item of State significance.

**The Newcastle City Centre - Local Environment Plan 2008 (LEP)** lists the Fort Scratchley Group as an item of State Significance and appears on the NSW State Heritage Register as item ID No 2170240.

### Commonwealth and State Legislation

The Fort Scratchley site is subject to Commonwealth and State legislation as follows:

#### “Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act requires that any action likely to have a significant impact on the environment or an adverse impact on a Commonwealth Heritage place must only be taken with prior approval from the Commonwealth Minister for the Environment, Heritage and the Arts. The Act also contains provisions relating to the protection of Commonwealth Heritage values, including the preparation of heritage management plans for Commonwealth Heritage places. In addition, the Act stipulates requirements to be met in the event of transfer of a Commonwealth Heritage place.

The Fort Scratchley site was placed on the Commonwealth Heritage List subsequent to the 2004 heritage amendments to the EPBC Act. Prior to this time, the site was listed on the Register for the National Estate. The Commonwealth Heritage List comprises natural, Indigenous and historic heritage places owned or controlled by the Commonwealth. These include places connected to defence, communications, customs and other government activities that also reflect Australia's development as a nation. Following transfer of site ownership to Newcastle City Council, the site will be removed from the Commonwealth Heritage List.

#### NSW Heritage Act 1977

The NSW Heritage Act contains measures for the protection of NSW sites listed under the Act, including requirements for maintenance, preparation of Heritage Management Plans,



as well as approval of works with the potential to have an adverse impact on heritage values.

The Coal River Precinct, which includes the Fort Scratchley site, is listed under the NSW Heritage Act on the NSW State Heritage Register. The precinct was gazetted on 19 December 2003. This listing will take legal effect in relation to the Fort Scratchley site following transfer of site ownership from the Commonwealth to the Newcastle City Council.

### **NSW Environmental Planning and Assessment Act 1979**

The Newcastle City Centre - Local Environment Plan 2008 (LEP) lists the Fort Scratchley Group as an item of State Significance. This listing was first gazetted on 19 December 2003 and appears on the NSW State Heritage Register as item ID No 2170240. This LEP contains provisions for the protection of listed heritage items that will have full legal effect in relation to the Fort Scratchley site following transfer of site ownership from the Commonwealth to the Newcastle City Council.

### **Assessment of Significance within the Legislative Context**

As this HMP has been prepared to satisfy the requirements of both the EPBC Act (pre-transfer) and the NSW Heritage Act (post transfer), an assessment of significance has been carried out under Commonwealth Heritage List Criteria and correlated with equivalent NSW Heritage Assessment Criteria. The Fort Scratchley site has also been considered in relation to the threshold of “outstanding significance” under the National Heritage List Criteria, in the event that the Newcastle City Council may consider it appropriate to initiate nomination of the Fort Scratchley site to the National Heritage List following transfer of ownership.”

### **Transfer of Ownership**

For the purposes of this study, the site is under Commonwealth ownership and control, and therefore falls within the jurisdiction of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC). Following the proposed transfer of the site to ownership by the Newcastle City Council, the property will then become subject to the NSW Heritage Act as a State listed item, and the provisions of *Newcastle LEP 2003, Part 4 – Environmental heritage conservation*.

## **PART 7 – STATEMENT OF SIGNIFICANCE**

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### **7.1 COMMONWEALTH HERITAGE LIST CRITERIA AND NATIONAL HERITAGE LIST CRITERIA**

The Commonwealth Heritage List and the National Heritage List utilise the same criteria, with the exception of the threshold for the National Heritage List being “outstanding heritage value to the nation” rather than the threshold of “significant heritage value” applied under the Commonwealth Heritage List.

The comparative analysis undertaken in conjunction with this study has demonstrated the site has significance above the threshold level of heritage value for recognition as a place of **outstanding heritage significance**, and is therefore assessed under the National Heritage List Criteria.

#### **National Heritage List Criteria**

The criteria for inclusion on the National Heritage List need to be determined by comparative analysis. The criteria are as follows:

**Criterion a:** *the place has outstanding heritage value to the nation because of the place’s importance in the course, or pattern, of Australia’s natural or cultural history*

*(NSW:- criterion A: an item is important in the course or pattern of NSW’s cultural or natural history )*

**Criterion b:** *the place has outstanding heritage value to the nation because of the place’s possession of uncommon, rare or endangered aspects of Australia’s natural or cultural history*

*(NSW:- criterion F: an item possesses uncommon, rare or endangered aspects of NSW’s cultural or natural history)*

**Criterion c:** *the place has outstanding heritage value to the nation because of the place’s potential to yield information that will contribute to an understanding of Australia’s natural or cultural history*

*(NSW criterion E: an item has potential to yield information that will contribute to an understanding of Australia’s natural or cultural history)*

**Criterion d:** *the place has outstanding heritage value to the nation because of the place’s importance in demonstrating the principal characteristics of:*

- (i) a class of Australia’s natural or cultural places; or*
- (ii) a class of Australia’s natural or cultural environments*

*(NSW: criterion G: an item is important in demonstrating the principal characteristics of a class of NSW’s cultural or natural places or cultural or natural environments)*

**Criterion e:** *the place has outstanding heritage value to the nation because of the place’s importance in exhibiting particular aesthetic characteristics valued by a community or cultural group*

*(NSW: criterion C: an item is important in demonstrating aesthetic characteristics and/ or high degree of creative or technical achievement)*

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

*(NSW:- criterion C )*

**Criterion g:** *the place has outstanding heritage value to the nation because of the place's strong or special associations with a particular community or cultural group for social, cultural or spiritual reasons*

*(NSW criterion D: an item has a strong or special association with a particular community or cultural group)*

**Criterion h:** *the place has outstanding heritage value to the nation because of the place's special associations with the life or works of a person or groups of persons of importance in Australia's natural or cultural history*

**Criterion i:** *the place has outstanding heritage value to the nation because of the place's importance as part of indigenous tradition.*

## 7.2 ASSESSMENT OF FORT SCRATCHLEY UNDER NATIONAL HERITAGE LIST CRITERIA

Fort Scratchley is a rare and intact example of its type, and has outstanding significance under the majority of the National Heritage List Criteria. Therefore, the Newcastle City Council may wish to consider whether it may be beneficial to initiate nomination of Fort Scratchley under the National Heritage List following transfer of ownership.

The site of Signal Hill and Fort Scratchley is discussed as the total precinct defined in the introduction. A distinction should be made in the assessment of significance between the inner fort precinct which contains the intact battery and barracks complex within the walled compound, and the outer fort precinct which has been the site of many generations of development since the inception of the fort and is now largely open space.

- **The inner fort is a precinct of outstanding significance and intactness.**
- **The outer fort is a precinct of high historical and archaeological significance for the support role this zone has played throughout the history of the fort.**

### Criterion A - Historic Value

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

Signal Hill has historical associations dating to the earliest convict settlement of Newcastle, and was the source of the first coal deposits mined in the region. The first coal to be exported from Australia is reputed to have originated from Signal Hill.

Signal Hill was the site of navigational control of the port of Newcastle for 99 years from 1815 until 1914.

From 1882, Fort Scratchley was an important site in the course of Australian history, in the development of coastal defences in NSW and in the defence of the city of Newcastle. Signal Hill was the site of a range of permanent defence installations since the 1860's, representing over 110 years of continuous military presence.

Fort Scratchley is physical evidence of the evolutionary development in changing armaments and military technology. The development of the site may be readily interpreted through investigation of the layering and interface of remaining structures.

Signal Hill and Fort Scratchley were associated with the formation of Newcastle's Voluntary Militia Forces and were part of the eastern states Voluntary Forces Network.

Fort Scratchley has the distinction of being 'The only Australian fort to have fired in action at an enemy surface target'. Fort Scratchley was the scene of a hostile encounter with Japanese forces during World War II, when shots were fired at a submarine in response to shell fire directed at the BHP Steelworks and the east end of Newcastle. In comparison, the coastal defence forts of other southern Australia cities saw action only in the form of warning shots for identification of shipping on several occasions.

### **Criterion B - Rarity**

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

Fort Scratchley is important as a rare example of a closed coastal battery fortress as evidenced in the planning as a defensive complex, and in the fabric of the place including casemates, barbettes, tunnels and armoury complex, barracks and other support buildings, parade ground and protective wall and dry moat.

### **Criterion C – Scientific**

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

Fort Scratchley and Signal Hill demonstrate a range of periods of military technology with the potential to yield information about the organisational structure of coastal defence in Australia between 1820 and the mid 20<sup>th</sup> Century.

The site contains numerous places and items with archaeological potential including the gun emplacements and tunnels, and sites of former buildings and structures, the dry moat and the surrounding open grounds. This diversity of items encompassing such a long period of development is not available at any other comparable site in Australia.

### **Criterion D – Representative**

*The place has outstanding heritage value to the nation because of the place's importance in demonstrating the principal characteristics of:*

- i. a class of Australia's natural or cultural places; or*
- ii. a class of Australia's natural or cultural environments*

**(NSW Criterion G)**

The design and planning of the site clearly continue the Colonial closed fortress concept which reflected British design precedent, imported by Scratchley and Jervois. The layout of the fort and its armaments are typical of military planning, reflecting the influence of English and colonial military installations designed by the Royal Engineers. The British colonial influence is evident in the original design and subsequent upgrading of the site, and is one of the most representative examples of colonial defence installations in Australia. Bare Island has a similar heritage and origins of design to Fort Scratchley, however Fort Scratchley is unique for a coastal battery in Australia in its capacity to demonstrate the development in military technology from 1882 until after World War 2. All phases of this development may be interpreted in the fabric of the structures.

The separation of the ranks and hierarchy of the officer ranks is expressed in the layout of the buildings, and the relative standards of accommodation of the Commandant's cottage, the barracks buildings and separate ablutions for officers, NCOs' and soldiers.

### **Criterion E – Aesthetic**

*The place has outstanding heritage value to the nation because of the place's importance in exhibiting aesthetic characteristics and/ or a high degree of creative or technical achievement (Aesthetic themes)*

#### **(NSW Criterion C)**

The fort illustrates the ordered military planning associated with defence sites, which is a continuation of the long standing tradition of English military planning in the colonies. Viewed from the sea, the fort structures are deliberately inconspicuous, defensively blending into the profile of Signal Hill. However from the land, the fort complex presents a formidable stronghold, visually impenetrable by the austere surrounding walls, protective moat and guarded bridge access. Very few of the Australian coastal fortifications can compare with the classical military aesthetic demonstrated by Fort Scratchley.

The elevated site is set against a backdrop of spectacular coastline to the east and panoramic views of the city and Hunter River to the south and west. The defensive ramparts protecting the city of Newcastle and the Hunter River expresses the visual quality of an iconic fort, both for its geographical location and physical form, unlike any other defence complex in Australia. The visual qualities and impact of the fort as a prominent landmark in the city of Newcastle is greatly enhanced by its spectacular setting. The site reinforces the close links between the city, the port and the sea.

The architectural quality of the fort structures is restrained but designed to high level of competence, and is dominated by the military engineer designed fortifications. Simplified Regency stylistic elements however are evident in the important buildings designed for people, the Commandants Cottage, the Barracks and the Guard house.

The intact Nineteenth century battery complex, associated barracks buildings and military structures enhanced by its spectacular coastal headland position, is unsurpassed by any other comparable site in Australia.

### **Criterion F - Creative/ Technical**

*The place has outstanding heritage value to the nation because of the place's importance in demonstrating a high degree of creative or technical achievement at a particular period (NSW Criterion E)*

Fort Scratchley and the Signal Hill site represent a range of periods of defensive

technology and its continuous development between 1860 and 1972. The fabric of the structure has interpretive value in the investigation and understanding of the evolution and development of coastal military technology over a period of more than 110 years. It is the combination of intact innovative technology associated with a long period of historical development that sets this site apart from comparable sites in Australia.

The fort structures are significant for their use of reinforced concrete construction, a technology that in the 1880s was rare in civil engineering and construction. Some slab elements are reinforced with bullhead profile rail, relics from the pioneering railway development in the Hunter, using imported iron rails.

Military features of Fort Scratchley which were particularly innovative in technical and scientific terms in relation to the development of contemporary fort batteries during the late Nineteenth century include:

- Shell Lifts: A very rare and significant engineering feature of Fort Scratchley is the system of three iron and chain shell lifts servicing the gun positions.
- Tunnel Lighting: The tunnel lighting system at Fort Scratchley is of particular quality and significance; even on a world scale.
- Casemate Lighting: Another very rare asset of the Fort has been the world-class reconstruction of the 'Tremletts Pattern Fighting Lamp'.
- Gun Control Systems: Evidence remains of Depression Range Finders of the 1880s; the extended Battery Observation Post of WWI – II
- Battery Observation Post: This building retains many internal features which are evidence of former range finding and other installations, and is a rare intact example of its type in Australia.
- Mines Firing Station Observation Post: The mines firing station is a rare element.

## Criterion G – Social

*The place has outstanding heritage value to the nation because the place has a special or strong association with a particular community or cultural group for social, cultural or spiritual reasons.*

**(NSW Criterion D)**

Fort Scratchley is important to the many Defence personnel who were trained or stationed at the complex in its 90 years of operation for Defence purposes, and to military historians. This is demonstrated in the determination of former personnel of the AWAS, RAEME Defence Reserves and Regular Army to establish a military museum at the fort in the early 1980s.

Volunteer military forces were first established at Fort Scratchley in 1860 to man the Fort garrison, one of the earliest volunteer regiments formed in the colony of NSW.

On 8 June 1995, a plaque was unveiled at the Fort commemorating the 53<sup>rd</sup> anniversary of the shelling of Newcastle and return fire by Fort Scratchley in 1942.

In a ceremony conducted by the Prime Minister in 2002, Fort Scratchley was “dedicated to all the serving and ex-service men and women of Australia”, thus reinforcing the connection with site by former servicemen.

Fort Scratchley is important to the people of Newcastle as a major tourist attraction, and as a complex with major scenic and historical qualities.



## **Criterion H - Associative**

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

### **(NSW Criterion B)**

Fort Scratchley is associated with the military planning and design of British Military Engineering specialist, Lieutenant Colonel (later Sir Peter) Scratchley and Colonel (later Sir William) Jervois, both achieving eminence in their field during their lifetimes and long after during Australia's later years of colonial administration.

The Commandant's Cottage, the barracks and guardhouse were designed by Gustave Morrell, an architect within the Colonial Architect's Office, with involvement and oversighting by Colonial architect James Barnet. James Barnet had already achieved acclaim for his prolific portfolio of late C19th public buildings in NSW, including Newcastle Customs House within sight of Fort Scratchley.

## **Criterion I – Indigenous**

*The place has outstanding heritage value to the nation because of the place's importance as part of indigenous tradition*

No indigenous significance of the Signal Hill site or surrounding precinct has been identified in this study.

### 7.3 STATEMENT OF CULTURAL SIGNIFICANCE

Fort Scratchley is unique in Australia as an intact cohesive coastal fortress complex located at the seaward flank of a major metropolis. The battery structures are physical evidence of the layering of the progression of several generations of armaments which provided the major defence installation for the city of Newcastle and the harbour entrance from 1882 to 1972. Fort Scratchley is one the most important strategic coastal defence sites in NSW. Its siting was recognised early for its advantages for navigation and defence of the port of Newcastle. From this elevated position, it was possible to view the NSW coast (north and south) but also to defend the entrance to the river from threats from within and without. The siting of Newcastle close to the mouth of the river meant that a fort at the site of Fort Scratchley functioned as both an inner and outer line of defence. [NHL Criteria A & B]

During World War II, Fort Scratchley's defensive role was exemplified as the scene of a hostile encounter with Japanese forces. Shots were fired from Fort Scratchley at a Japanese submarine in response to shell fire directed at the BHP Steelworks and the east end of Newcastle, making Fort Scratchley the only Australian fort to have fired in action at an enemy surface target.

The site of Fort Scratchley was strategically located on the geographically prominent Signal Hill. It afforded views to the town, mouth of river and the coast. As a strategic site for defence and navigation in Newcastle, it was early capitalised upon by early settlers. The fort contributes to the aesthetic and landmark quality of the site. It was an important component of the historical development of the Signal Hill/ Nobbys Beach precinct. [NHL Criteria A & E]

Signal Hill is historically significant in the early development of Newcastle prior to establishment of the fort. It was the site of the first coal mine and thus it marks the inception of a major industry in the Hunter Region up to the present day. It was the site of several military detachments from 1860 before the permanent establishment of the fort in 1882. [NHL Criteria A & C]

Signal Hill was the location of the signal station for the Port of Newcastle from 1815 until 1914, a continuous use for this purpose for 99 years. [NHL Criterion A]

The development of the site responded to the evolutionary upgrading of armaments. The original four 80 pounder guns in the casemates and barbette facing the harbour and three 9" guns facing seaward were replaced by 6" disappearing guns, later replaced by 6" breech loading guns. The casemates were upgraded with Nordenfeldt quick firing guns. The fort structures changed accordingly and upper level gun emplacements were covered over to form tunnels. [NHL Criteria A & D]

The barracks buildings constructed shortly after the fortifications are evidence of the occupation of the fort by military personnel, with clearly defined rank and roles within the functioning of the fort. A separate residence was provided for the commandant, while soldiers were accommodated in the barracks, guardhouse and later separate married quarters provided outside the fort compound.

The design and planning of the site clearly continues the Colonial Barracks concept which reflected British design precedent. The site has direct connections with the Bare Island Fort at the entrance to Botany Bay as these places are linked by their shared coastal defence histories, and contemporaneous design and development. [NHL Criterion D].

Fort Scratchley has important associations with the military planning and design of British Military Engineering specialist, Lieutenant Colonel Peter Scratchley and Colonel Jervis. [NHL Criteria A & H]

Fort Scratchley is a rare example of a functional barracks associated with an extant fortifications site [NHL Criteria B E & F]. The Commandant's Cottage, the barracks and guardhouse were designed by Gustave Morrell with involvement and oversighting by Colonial architect James Barnet. [NHL Criteria A & H]

Fort Scratchley is important to the many Defence personnel who were trained or stationed at the complex during the ninety years of operation for Defence purposes, and to military historians, in particular the Royal Australian Artillery Historical Society. [NHL Criteria G].

**The foregoing Comparative Analysis has demonstrated that Fort Scratchley is a site of outstanding cultural heritage significance, unique in Australia as the largest and most diversified and intact coastal fortress and barracks complex.**

## 7.4 SIGNIFICANCE OF THE SETTING

The setting of Fort Scratchley is the larger area around the site which includes the natural environment of Signal Hill and the views to and from the site, and the dramatic interface with the edge of Newcastle City. It is important to maintain the significance of the setting, as development decisions which adversely affect the setting of a heritage place will usually impact on the heritage place itself. The setting in this case makes a very important contribution to the significance of the Fort Scratchley site.

Appropriate management of the wider setting of the site is therefore an important factor in the future heritage management of the site, and should take account of the changed setting of the outer fort precinct which is currently predominantly open space. This area was the site for several generations of buildings and development during the Army years up to 1972

## 7.5 VIEW ANALYSIS

The site is visually spectacular largely for the wide range of views to and from Fort Scratchley, encompassing views of the harbour, Stockton, the city of Newcastle, Customs House, the Cathedral and a spectacular coastal panorama to Stockton Bight including views over Nobbys and Newcastle Beaches.

## 7.6 SIGNIFICANT CURTILAGE

The significant immediate curtilage is the area indicated on the Curtilage Plan, (Figure 1.1) bounded by Nobbys Road to the south and west and Fort Drive to the east and north.

The greater curtilage includes areas with potential to affect views of the Fort and its presence in the landscape. Vistas to and from the Foreshore Park, Nobbys, over the Hunter River, the immediate cityscape of Newcastle, and the view to the fort on approach from Parnell Place contribute to the visual quality and significance of the site.

## 7.7 INDIVIDUAL STATEMENTS OF SIGNIFICANCE

Refer grading of significance, Section 7.8

### THE INNER FORT PRECINCT – THE BATTERY COMPLEX

#### The Gun Emplacements

Comprising:

- Barbettes**
- Casemates**
- Tunnels**
- Gunners' Mess**
- Magazines**
- Ammunition hoists**
- Depression Range finders**

Every stage of the alterations to the gun emplacements and the tunnels since the late 1870s until 1945 is legible and visible in the fabric of the battery structures.

The emplacement embodies the development of "closed fort" military technology from the late Nineteenth century to the middle of the Twentieth century. Much of the equipment and fittings in the tunnels including the ammunition hoists, the lamps, the system of using down-sloping gradients to assist the transport of armaments, are examples of innovative and in some cases unique technology.

#### **Barbettes**

The most significant example of structural modification is in the roofing of the open tunnels serving the three guns "en barbette" when, in 1889, the three positions were updated for 'disappearing' guns. This modification uniquely provided the Fort with fully enclosed fighting areas. Few other Australian forts can demonstrate such major structural rearrangements over a long period.

#### **Casemates**

The gallery of three casemates at Fort Scratchley is representative of the prevailing, late Nineteenth century style of battery construction in the larger British forts, such as Fort Nelson. The upper and Lower Batteries at Georges Head are the only equivalent of this arrangement elsewhere in Australia.

The 1880s designed tunnel system is extensive and, except for the 1889 roofing of the western passages is quite original. The layout is innovative as the tunnels run downhill in the direction of loading ammunition, either into the central magazines, or out of them to the deep shell lifts. This feature is not exhibited so clearly in any other Australian fort.

#### **Tunnels**

The construction, arrangement and drainage of the original tunnels employed state of the art engineering techniques and reinforced concrete technology.

The design and layout of the tunnels and gun emplacements are associated with Colonels Jervis and Scratchley who were the British experts on coastal defence called in to advise the colonies. The major flanking batteries at Fort Scratchley combine both 'en barbette' (open) gun pits to seaward and the 'casemates' (enclosed gun positions) protecting the

river entrance. Bare Island Fort also by Jervois and Scratchley, is the only other fort in Australia with this configuration of gun emplacement on the one site.

**Tunnel Lighting:** The tunnel lighting system at Fort Scratchley is of particular quality and significance; even on a world scale. The main feature of significance is the finely crafted brass frames with protective mesh, which were fitted to main passageways throughout the tunnels.

**Casemate Lighting:** Another rare asset of the Fort has been the world-class reconstruction of the 'Tremletts Pattern Fighting Lamp' which is solidly designed and mounted to resist breakage in the casemates.

### **Gunners Mess**

This area comprises fixed benches and seats for meal and crib breaks for the gunners on duty at the fort battery. In 1978, only fragments of the joinery had survived. This evidence was the basis for the reconstruction of this area

### **Magazines**

The main magazine beneath parade ground was located strategically underground for protection of the ammunition supplies to the battery. It comprise two large arched spaces for storage and batching of ammunition and is one of the most complete and intact such installations remaining in Australia. Casemate Battery No 1 was also converted for use as an additional magazine facility.

### **Shell Lifts**

A rare and significant engineering feature are the three innovative shell lifts servicing the eastern gun positions from the lowest ends of the tunnels. There is no other fort location in Australia with a similar system of shell lifts.

### **Depression Range Finders**

At Fort Scratchley it is still possible to interpret changes made in the systems used for directing fire of a gun battery. Evidence remains of Depression Range Finders of the 1880s; the extended Battery Observation Post of WWI – II.

## **Ramparts and Outer Walls**

The ramparts and outer walls are the most prominent and visible feature of the fort viewed from any direction. Fort Scratchley is a landmark site in Newcastle and it dominates the skyline from the city and the Foreshore Park. The ramparts, outer walls and dry ditch, and the elevated position of the fort are a local equivalent of the ramparts and castles from which the English heritage of the fort was derived.

The rampart walls and battery structures of Fort Scratchley were built of mass concrete. Modifications were made in 1889 to accommodate the 'disappearing guns' and in this instance, concrete across the roof of the tunnels was reinforced with sections of iron railway line of 'bullhead' profile. Similar construction was used at Bare Island Fort. Both forts were very early examples of the use of reinforced concrete in Australia.

The upper, sloping ramparts were constructed of reinforced concrete in 1914 as batter protection. The upper walls and sloping top surface of the Fort were designed to divert the

incoming shells over the works themselves. The gun batteries on Middle Head, Sydney Harbour were also constructed and modified by Jervois and Scratchley on this principle.

### **Battery Observation Post (BOP, Building 25) Code 3210**

The BOP is a representative example of an early Twentieth century elevated bunker style building of which similar examples remain at other coastal battery sites such as North Fort, Cape Banks and Middle Head.

The structure remains intact, however the original bronze window frames have been reconstructed. Many items of internal fittings remain as evidence of the battery range finder and other equipment related to relaying firing coordinates to gunnery personnel.

A significant and prominent feature of the BOP was the signal mast, which has been partially reconstructed by the FSHS.

Fort Scratchley has retained the essential elements of the battery complex, including guns, searchlight station, signal mast, all of which were controlled from the BOP.

### **Parade Ground Code 3110**

The parade ground was significant as the centre of ceremonial activity on the site, and regular inspections and special ceremonies have been held in this area since the establishment of the fort. The flagstaff and signal mast were integral components of this activity.

Some evidence of the former west depression range finder and the communications trench to the Battery Observation Post have been obscured during the recent resealing program. The timber stair between the driveway and the parade ground (remains of reconstructed stair of 1983) is evidence of the access for the Commanding Officer from his residence to the command post in the BOP.

### **Flagstaff Code 3330**

The flagstaff is a refurbishment of the 1983 replica constructed by the Department of Housing and Construction. It is however a reasonably accurate reconstruction based on historical photographs and evidence of ground attachment points. It has interpretive value as a prominent iconic and symbolic feature of the site, and is visible from a long distance.

## **THE INNER FORT PRECINCT – THE BUILDINGS**

The layout of above-ground buildings at Fort Scratchley is based on British military planning principles, by their placement below expected enemy fire. The Fort buildings remain largely intact and the planning arrangement of the complex is generally unchanged since the 1880s. The buildings being mostly protected inside the fort walls, demonstrate the various functions required to support a coastal battery. There are barracks, a Commandant's Cottage with servant quarters, offices, kitchen, ablution blocks, guard house, searchlight emplacement, generator room and an armoured laboratory used for preparing gun cartridges:



## **The Barracks group of buildings**

### **Comprising:**

**Kitchen Block, North Barrack B 22 Code 1250**  
**Canteen and Stores, South Barrack Block B 21 Code 1240**  
**Barracks, West Barrack Block B 20 Code 1230**

The barracks were designed by GA Morell and the design was overseen by James Barnett the Colonial Architect.

The layout arrangement and fixtures of the barracks illustrate the lifestyle expected of the ordinary soldier.

The Regency style has been utilized at its most elemental level to provide a number of simple pavilions arranged around a small parade ground within the fortress walls.

The gathering of stormwater and arrangement of water storage tanks has been particularly well engineered and is illustrative of the level of engineering expertise involved in the construction of the complex.

The profile of the roof of the roof and verandahs of the Barracks Buildings are prominent and visible from city

## **The Commandant's Cottage (Building 23) Code 1310**

The Commandant's Cottage was designed by GA Morell from the Colonial Architect's office, and the design was overseen by James Barnett the Colonial Architect.

The cottage is a rare surviving Nineteenth century example of a military Commandant's accommodation.

The location, style and arrangement of the cottage are illustrative of the lifestyle expected of a commanding officer in the late Victorian period.

The building has been associated with the officers who served in the fort since its early use as the commandant's quarters and later use as the officers' mess. The higher standard of finishes and detailing and the elevated position of the building is evidence of rank of the Commanding officer.

## **NCOs' ablutions block (Building 19) Code 1220**

This retains evidence as the amenities and washhouse for the senior ranks, but the fitout has not been reconstructed. Its significance is as part of the structure of the western fort wall.

## **Armoury (New Guardhouse, Building 17) Code 1140**

This rectangular rendered brick building was built as a secure store after WWII. It has two strong rooms at the rear. It has historical significance for its use as an important ancillary building associated with the personnel manning the Fort, and its later use as a guard house.

### **Old Guard House (Building 18) Code 1211**

The guard house is a classic Regency style parapetted building, visually prominent inside the main gates. It is historically significant for its important security role for the fort and aesthetically significant as a focal point at the entrance and the foot of the drive.

### **Ablutions block (Building 28) Code 1215, 1214**

This amenities structure was an infill building extending to the west of the guard house in matching parapet detail. It has aesthetic significance only to the extent that it completes the group of buildings arranged around the Barracks Building courtyard. It has been adapted as the major public amenities facility on the site.

### **Laboratory (Building 16) Code 1131, 1132**

The laboratory building has historical significance for its use in the filling of shells and other ammunition. The building comprises three spaces, the ante-room change area, the main shell filling room and store. The building retains evidence of the benches and fittings associated with this activity.

### **Gunners' ablutions (Building 15) Code 1121, 1122**

This is a highly significant building showing evidence of altered roof structure from skillion to pitched roof. The building contains early C20<sup>th</sup> WC (remnants of leather seat covers remain) and urinal fittings, including elevated pre-cast cisterns. The slate dividing partitions are of high social and historic value.

### **Generator room (Building 14) Code 1110**

The generator room blockhouse is significant as part of the searchlight and electrical infrastructure of the fort, evidence of its originally fully self contained facilities. The plinth for the generator remains intact.

### **World War II Searchlight Directing Station**

The bunker style searchlight building has been extensively reconstructed during the recent upgrading program, with replacement of the concrete roof. The building supported the searchlight mountings and was used as a directing station during and after the Second World War.

The searchlight emplacement site is historically significant and is associated with the World War II technology which was located on the site and relates to the generator house, Building No 14.

### **Entry Gates**

The timber framed steel clad entry gates are a refurbishment of the 1983 replica constructed by the Department of Housing and Construction. They are a reasonably accurate reconstruction based on historical photographs. They have interpretive value as important and prominent features of the site.

## **Bridge**

The bridge is not original and has been rebuilt and strengthened several times. The bollards and chains are 1983 replicas of the original and are an important aesthetic feature of the entry in combination with the gates.

## **Dry ditch and wall**

The dry ditch and wall provide evidence of the belief in the possibility of invasion and an attack from the land.

The dry ditch and wall are significant elements in the landscape which allow the perception of the Fort as a closed military installation.

## **OUTER FORT PRECINCT**

### **Driveway**

The driveway has been sealed in later years and is historically significant as the location for the driveway since the earliest use of the site. The original driveway was sandstone flagging and a section of the stonework remains beneath the concrete paving (refer photo Fig 4.22)

### **Parking area**

The site has archaeological significance as the location of the former mess hall

The apron of transport garage was extended for additional parking, and is a remnant of the former building on the site.

## **The Submarine Mines Command and Observation Post**

The submarine mines installation was an integral part of the planning for the original coastal defence strategy which was centred on the Fort at Newcastle. The mines firing station was constructed to control the mines laid as part of the Jervis master plan, across the entrance to the port of Newcastle. It represents an excellent example of a Nineteenth century defence principle that submarine mines and obstructions placed in a channel are usually used in close conjunction with nearby forts and are often regarded as the major defensive element.

The submarine mines command and observation post is a relatively rare survivor of a particular technology which was popular during the 1870s and superseded by the 1900s. This is the only submarine mine installation known to have existed in New South Wales outside Sydney Harbour and Botany Bay.

The submarine mines installation is the remaining extant link on site with the maritime history of Newcastle.

An associated structure, the mines winding station still exists at Pilot's Harbour, part of Newcastle Port Corporation property.

### **The former Emergency Services and Civil Defence area**

The site is historically significant and has archaeological potential for its layering of different uses since earliest settlement in the area. The site is associated with the early use of Signal Hill as a navigation station, and is also associated with the Royal Australian Engineers who are thought to have been involved in the turn-of-the-century modifications to the Fort.

In 1952, a complex of workshops was constructed for the Department of Works as the Newcastle Area Works Depot which relocated to Adamstown in 1976. The facility was then adapted as an SES Depot and the buildings were demolished in 1996.

The site is located immediately below the fort ramparts, it is presently open space and is part of the open recreational foreshore space of Newcastle. The area has low level archaeological potential for early uses of the site.

### **The Master Gunner's Cottage Code 4110**

The Master Gunner's Cottage is the sole remaining structure which is representative of the former married quarters which were located in the Outer Fort Precinct. The existence of such a cottage evidences the importance of the master gunner in the military structure of the Fort.

The cottage is a rare example of 1920's timber framed married quarters surviving at a defence establishment in NSW. Married quarters at North Head and Georges Heights were typically of masonry construction. Some contemporary timber framed examples remain at Middle Head, Sydney and Shepherds Hill, Newcastle.

### **The Former Transport Garage Code 4220**

The former Transport garage was associated with the later immediate post-war period of the Army's occupation of the Fort, but was extensively reconstructed for use as a workshop building during the 2007- 2008 works program.

### **Open areas**

#### **The Recreational Open Space and grassed area**

This area has archaeological significance associated with the early use of the hilltop as a Navigation Station, and lately as the site of the Fortress married quarters. It was also the site of a World War II ablutions block, a "skidding shed" and training gun emplacement. It comprises the extensive grassed areas to the west of the entry driveway to the Fort. The lower area is levelled for a childrens' playground and is equipped with relatively recent play equipment.

## 7.8 GRADING OF SIGNIFICANCE OF COMPONENT PARTS

Individual areas and component parts of the Fort Scratchley site have been assessed and a level of significance nominated. This detailed assessment is provided to facilitate decisions regarding future conservation and development of the site.

An assessment of the nature and level of heritage significance of the component parts is provided in the following table, in accordance with Commonwealth Heritage significance values.

Recommendations for the levels of significance of individual items were divided into six categories:<sup>54</sup>

### **1 Exceptional:**

The item is a demonstrably rare, outstanding and / or an irreplaceable example of its type. It has a high degree of intact and original fabric that is readily interpreted. Loss or alteration would substantively undermine the Commonwealth heritage values of the place overall.

### **2 High**

The item demonstrates a rare example of its type  
Is largely intact and interpretable  
Loss or unsympathetic alteration may diminish the Commonwealth Heritage values of the item and of the place overall

### **3 Moderate**

The item may have altered or modified elements  
Item is intact enough to be partially interpretable as a single item or as part of the site in its entirety  
Loss or unsympathetic alteration is likely to diminish the Commonwealth Heritage values of the item and potentially the place if inappropriately managed

### **4 Low**

The item may be largely altered  
Does not demonstrate the key defining qualities of the CH values, but may be contributory  
Alteration and / or modification may make it difficult to interpret the item depending on the existing integrity of the item  
Loss may not diminish the Commonwealth Heritage values of the place overall.

### **5 None (Does not meet CHL criteria)**

Item does not reflect or demonstrate any Commonwealth heritage values

### **6 Intrusive**

Potentially detracts from the overall Commonwealth heritage values of the place as an intrusive element.  
Loss may actually contribute to the Commonwealth Heritage values of the place.  
The item is an intrusive element in the heritage values of the place in its entirety

The threshold level for conservation is considered to be all items graded at Level 1 and 2, and retention of the vast majority of moderately significant items.

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<sup>54</sup> Commonwealth Heritage significance rankings

## 7.9 ASSESSMENT OF INDIVIDUAL ELEMENTS

The following table indicates grading of significance of individual elements of the site:  
**A Key Plan of significant items is provided (refer to Figure 7.1 ).**

Reference to Key Plan * (Code)	Description of element and Component Part	Grading of Significance
	<b>INNER FORT PRECINCT – the battery complex</b>	Exceptional significance
A	<b>Barbettes</b> Mark VII guns and pedestals New handrails	1 1 5
B	<b>Casemates</b> 80 pounder gun and carriage Nordenfeldt gun and mounting Signwriting on walls Lamp recesses Casemate# 1, fitout as magazine, racks & folding barrier Ventilation shafts and steel covers	1 1 1 1 1 1 1
C	<b>Tunnels</b> All lamps & lamp recesses, restored and reconstructed Signwriting Notice board Folding barrier and seat Bullhead rail slabs	1 1 1 1 1 1
D (2150)	<b>Gunners' Mess</b> Benches and tables, partially reconstructed Lamp recesses Signwriting	1 2 1 1
E (2310)	<b>Magazines</b> Racks Stable doors and all door joinery Benches Metal vent flue	1 1 1 1 1
F	<b>Ammunition hoists</b> Component parts of all hoists, restored and derelict, hand winches	1 1
G (2110)	<b>Artillery Store</b> Racks and hanging pegs	1 1

25 (3210)	<b>B25 Battery Observation Post</b> DRF pedestal Reconstructed bronze window frames Reconstructed joinery bench Remnant joinery fittings Remnant lino floor covering	1 1 2 2 1 2
H (3110)	<b>Parade Ground</b> <i>Intactness affected by altered and modified elements</i> Archaeological evidence of 3 DRF sites Communications trench (now covered)	3 1 3
I (3330)	<b>Flagstaff</b> <i>Conjectural reconstruction of original</i>	3
	<b>INNER FORT PRECINCT – the buildings:</b>	Exceptional significance
22 (1250)	<b>B22 Kitchen Block</b> <i>Significant spaces:</i> Kitchen and hearth Wash Room and hearth Barracks Office and fireplace NCO Room 4 and fireplace NCO Room 3 and mantelpiece	1 2 2 1 1 1
21 (1240)	<b>B21 Canteen and Stores</b> <i>Significant spaces:</i> NCO Rooms Canteen Recreation Room and fireplace	1 2 2 1
20 (1230)	<b>B20 Barracks, West Barrack Block</b> <i>Significant spaces:</i> Barracks North and Barracks South - reconstructed fireplace, joinery fittings, shelves - corrugated iron ceilings - lino floor coverings (modern)	1 1 1 4
23 (1310)	<b>B23 Commandant's Cottage</b> <i>Significant spaces:</i> Sitting Room, Bedrooms 1-3 and reconstructed fireplace, ceilings, door and window joinery Servants bedroom, kitchen Wash house	1 1 2 2 2
24	<b>B24 Garage, not intact, brick wall only</b>	4
J (1210)	<b>Ablutions block and store (ext structure)</b> Public toilets (modern) Comms room	3 4 4



18 (1210)	<b>B18 Old Guard House</b>	1
	Remnant internal paint finishes	2
	Fireplace hearth	2
	Flagstone paving to verandah	1
	Reconstructed verandah awning	3
19 (1220)	<b>NCO's Ablutions block</b>	2
	Remnant flue to laundry	2
16 (1131- 1132)	<b>B16 Laboratory</b>	1
	Changing bench	1
	Steel shutters	2
	Ventilation flue	1
	Signwriting	1
	Internal door joinery	1
	Lamp recesses	1
15 (1121- 1122)	<b>B15 Gunners' Ablutions</b>	1
	Slate partitions	1
	WC pans & cisterns	1
14 (1110)	<b>B14 Generator room</b>	2
	Diesel plinth	2
	Wall fittings	2
K	<b>Inner fortress wall</b>	1
17 (1140)	<b>New Guardhouse</b>	2
	Steel door	2
L	<b>World War II Searchlight Directing Station</b>	3
	<i>Extensive reconstruction to fabric</i>	
	Roof slab	3
	Wall structure	2
	Footings of generators, fuel tanks	3
M	<b>Driveway</b>	
	Concrete paving	3
	Sandstone flagging (buried)	2
N	<b>Entry Gates</b>	2
	Replica steel lined timber gates	2
	Sandstone piers	1
	Replica copper gas lanterns	2
O	<b>Bridge</b>	3
	<i>Reconstruction</i>	
	Timber structure	3
	Replica bollards	2
P	<b>Dry ditch and wall</b>	1
	Sandstone open drains	1
	Sandstone coping elements	1
	Rendered concrete walls	1

<b>OUTER FORT PRECINCT</b>		High significance
iii	<b>Driveway</b>	4
	Rusty anchor	6
	Sandstone blocks	6
	Reconstructed post and rail fence	4
iv	<b>New parking area</b>	4
	Site of earlier structures, remnant footings of Mess Hall	2
i	<b>Submarine Mines Command and Observation Post</b>	1
	Slate steps	1
	Drawings on walls	1
	Iron brackets	1
ii	<b>Former Emergency Services and Civil Defence area</b>	4
4 (4110)	<b>B4 Master Gunner's Cottage</b>	2
	Picket fence reconstruction	3
	Internal plasterboard linings	4
V (4220)	<b>New Workshop, site of former Transport Garage</b>	5
Vi (4250)	<b>Multi Purpose Centre</b>	5
vii	<b>Recreational Open Space</b> - site of earlier structures	3
	Archaeological potential	
viii	<b>Childrens' playground</b>	4

Refer to Key Plan, Figure – 7.1

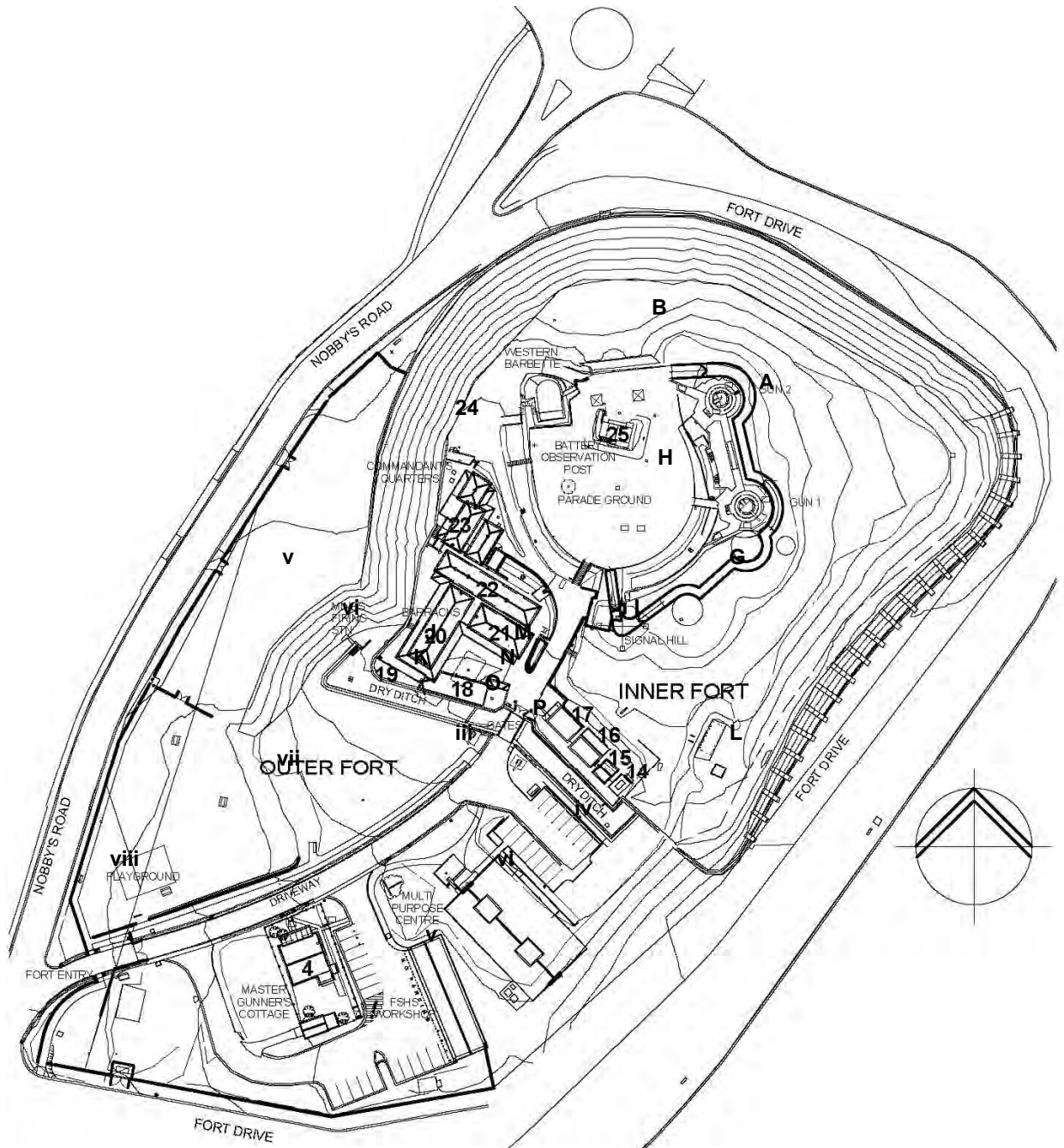
\* **Building Numbers refer to Dept of Defence Asset No**  
**Letters refer to unnumbered items within Inner Fort Precinct**  
**Roman numerals refer to items within Outer Fort Precinct**

Refer Section 9 Policies

Refer photos 4.10

## Assessment of Movable Heritage

A number of items of movable heritage exist at the fort which contribute to the significance of the place and assist in the understanding and interpretation of permanent structures within the battery complex. These include a 80 pounder RML gun mounted on gun carriage in the casemate, Nordenfeldt quick firing gun, 80 pounder barrel in western barbette, two 6" Mark VII guns mounted on working pedestals and the barrel of a 6" disappearing gun recently temporarily mounted in gun emplacement GE 2. In addition the Fort Scratchley Historical Society has many items of armaments and military hardware and fittings for display in various areas of the fort. Detailed recommendations as to the management of these items and appropriate display are outlined in the Exhibition Strategy report prepared by ICS in conjunction with this study.



**Figure 7.1. Key Plan for Fort Scratchley Site**

**Refer table, Grading of Significance**

## **PART 8: MANAGING SIGNIFICANCE**

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### **8.1 INTRODUCTION**

The previous section has established that Fort Scratchley has considerable historic, aesthetic, social, associative and scientific/technological significance. It is important in the formulation of conservation policy to ensure that future use and/or development of the site has minimal impact on its heritage values.

Viable ongoing functions would offer the greatest opportunity for long-term conservation, would minimise vandalism, and (through controlled access) would improve the level of security for the site.

The development of an appropriate set of Conservation Policies must include consideration of factors including opportunities and constraints arising from:

1. The heritage significance of the building (The Statement of Significance)
2. Current use of the building and the requirements of the site users, owners and the community, and the available resources
3. The physical condition of the place
4. Requirements imposed by external factors
5. Statutory constraints.

### **8.2 ISSUES ARISING FROM SIGNIFICANCE**

The site is significant for a variety of reasons as described in Part 7; therefore the site must be protected and exploited in an appropriate manner.

To maintain the unique character of the complex of buildings and the visual quality of the setting, and to ensure that both the integrity and legibility of the fabric is not lost through inappropriate development, the following constraints should apply to any future intervention:

- Usage which may detrimentally affect the historic, technical, social or cultural significance of the place, site or buildings within the inner or outer fort should be prohibited. Specific examples may include:
  - Uses which may become permanent and obscure detail that contributes to the visitors' opportunity to interpret the significance and history of the site
  - Uses that may damage the existing built fabric through the erection of structures, the running of building services, painting or the likeAll temporary work relating to proposed uses should be reversible without damage. Uses should be assessed according to their individual merit.
- Alterations or new development should be strictly limited and controlled to ensure that there is no loss of significant fabric.
- Significant fabric should be appropriately conserved.
- Surrounding development should be controlled to limit physical and visual impact.

- Appropriately qualified and experienced consultants and tradesmen should be used for the conservation works and/or further development of the site.
- Opportunities arising from the significance of the building should be considered in determining future use.
- Management policies must ensure that Fort Scratchley and its curtilage are protected from inappropriate development as described by this Plan. In cases where the significance of any component parts of the site are not immediately evident to the visitor, concise informative interpretive devices should be provided.

## 8.3 OWNERSHIP AND USE

### Future Ownership and Leasing

The property has been in public ownership since its original construction. The proposal for transferring ownership to the Newcastle City Council is compatible with the most effective possibility for its ongoing management and protection in the public interest. Any change in arrangement for sub-letting individual areas within the site should be accompanied by mandatory conditions for adherence to the policies of this Heritage Management Plan.

Conservation work priorities must take account of possible uses, safe and equitable access requirements. Given that the fort was developed on top of a hill for fit able-bodied soldiers there will be a need to reach acceptable compromises between access compliance and the protection of heritage values. The minimum requirement is that any works do not irreversibly damage original fabric.

The organisers of events, businesses and volunteer groups planning to work on the site must ensure that their activities will be compliant with the considerations and requirements of this Heritage Management Plan as an agreed condition of their presence on the site.

## 8.4 PHYSICAL CONDITION

A balance must be achieved in the conservation and upgrading of the structural and building fabric to retain as much evidence as possible of its former functions. Wear and tear of the fabric and the patina of time should remain visible, provided that safety and operational standards are not compromised. Any failures, breakages or vandalism must be addressed quickly and rectified to limit ongoing damage. Regular, proactive, cyclical preventative maintenance and ongoing repair must be planned and undertaken to prevent the degradation of existing fabric in the harsh marine environment and to ensure the best long term value is gained from the current expenditure.

### Condition of the Fabric

The entire site is nearing the completion of a major conservation and infrastructure upgrade project, involving the most comprehensive upgrading and refurbishment of most buildings and structures ever undertaken at the site. The physical condition of significant structures and building fabric is generally sound although though the project did not extend to other individual elements, for example the timber steps to the Parade Ground, the balance of the tunnel lamp enclosure reconstructions or the shell lift mechanisms. The work has been carried out generally in accordance with original design and finishes, although past conservation works have obscured original fabric in some areas. Sufficient evidence in the form of surviving fabric and early drawings is available to determine correct detailing and selection of finishes during the conservation process.

Issues which have potential to affect significant elements during the fitting out and occupation process, include the following:

- Mounting of services, concealment of conduits, ventilation ducting, security and surveillance systems
- Egress provisions for Building Code of Australia compliance
- Upgrading of toilets and amenities
- Further disabled access upgrades.
- Inappropriate and / or unacceptably installed signs.
- Installations (relating to the museum exhibits)
- Further additional lighting (relating to exhibits and interpretation devices)
- Further fire upgrades (relating to exhibits)
- Joinery fitouts.
- Visitors, littering , damage by vehicles.
- Vandalism

#### **Building Code of Australia Compliance**

In the future, when options for change in function or adaptive reuse are being considered, Building Code of Australia compliance for egress and fire provisions should continue to be assessed.

Some aspects of the buildings and fortifications at Fort Scratchley do not comply with the current Building Code of Australia (BCA). BCA compliance has been addressed as far as practical but some exceptions to full compliance remain. In some areas it is not feasible to provide such access given the nature of the Fort's design and original function.

Further identification of more specific building compliance issues will be required once individual building uses have been determined in detail, and should be based on the guidelines outlined in this Plan. The heritage values of the site will need to be taken into account in the development of appropriate solutions, if required.

## **8.5 PUBLIC AMENITIES**

Publicly accessible amenities within the inner fort precinct include the recently refurbished male and female toilets adjacent the Guardhouse accessed off the verandah. Two WC cubicles are located near the western inner wall, at the foot of the steps down from the Commandant's area.

Generally larger groups or visiting tour groups will have access to amenities within the new Multi Purpose Centre. Special events with larger groups will require other temporary strategies.

## **8.6 ENVIRONMENTAL CONDITIONS**

#### **Site Contamination & Hazardous Building Materials Constraints**

The entire site has been thoroughly inspected and hazardous materials including asbestos, oil, coal tar and chemical contaminants have been either removed, stabilised or capped and contained, then retested as part of a parallel project to the conservation and infrastructure upgrade project . This also included the stripping out of all lead based paint (or removing internal linings as for the Master Gunner's Cottage) inside the inner fort buildings.

### **Underground Storage Tanks**

The water storage cistern under the Barracks building courtyard and refurbished amenities was been assessed as structurally unsound prior to the current works. Remaining water was removed, drains disconnected and it has been filled with sand. The diverter is still operational.

Two cisterns remain viable, to the north of the Commandant's Cottage and beneath the parade ground.

### **Services**

Town water, fire services, sewerage, electricity, telecommunications services are all available on site and have been comprehensively upgraded on site during the current upgrading works. The main switchboard was relocated from the Guard House to an enclosure within the adjacent building.

### **Stormwater**

Drainage from downpipes from the Barracks buildings and Commandant's Cottage have been cleared of grout and siltation. There is now the opportunity to redirect the drainage to the two viable underground cisterns to improve the sustainability of the site.

### **Weed Management**

The barren nature of the landscape was essential to the operations of a coastal fort and is therefore an essential element of the heritage character of the site. Weed management should be addressed through low level landscaping, using low shrubs and ground covers, only as necessary to suppress Bitou and other weed infestation.

The peripheral areas of the slopes and ramparts are particularly vulnerable to weed infestation, due to limitations of access and exposure, thereby discouraging the establishment of native species.

### **Batters, Site Stabilisation and Turfing**

Landscape policies must address soil erosion and ensure stabilisation of all slopes, and batters to banks and after removal of weeds. Existing turfed areas are to be maintained.

## **8.7 PLANNING & HERITAGE STATUTORY CONSTRAINTS**

### **Commonwealth Legislation**

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) requires that any action likely to have a significant impact on the environment or an adverse impact on a Commonwealth Heritage place must only be taken with prior approval from the Commonwealth Minister for the Environment, Heritage and the Arts. The Act also contains provisions relating to the protection of Commonwealth Heritage values, including the preparation of heritage management plans for Commonwealth Heritage places. In addition, the Act stipulates requirements to be met in the event of transfer of a Commonwealth Heritage place.

Following transfer of site ownership to Newcastle City Council, the Fort Scratchley site will be removed from the Commonwealth Heritage List. At this time, the heritage provisions of



the EPBC Act will no longer apply to the site, unless the Newcastle City Council determines that it would be beneficial to nominate Fort Scratchley for National Heritage listing.

## State Legislation

The NSW Heritage Act 1977 contains measures for the protection of NSW sites listed under the Act, including requirements for maintenance, preparation of Heritage Management Plans, as well as approval of works with the potential to have an adverse impact on heritage values. As a Commonwealth owned property, Fort Scratchley has been excluded from the operations of State legislation. However, State legislation will have legal effect in relation to the Fort Scratchley site following transfer of site ownership to the Newcastle City Council.

As such, the Department of Finance and Deregulation and the Newcastle City Council intend to seek endorsement from the NSW Heritage Office for this Heritage Management Plan under the NSW Heritage Act. This endorsement will make the Plan legally binding under the Act, requiring NSW Heritage Office approval to be sought prior to undertaking any activities that would be inconsistent with the Conservation Policies described in this Plan.

## Exemptions from NSW Heritage Office Section 60 consent

Work proposed at the site under the following categories is exempt from the requirements of Section 60 Application to the NSW Heritage Office, based on **Standard Exemptions**<sup>55</sup> under the following categories:

- Painting of previously painted fabric
- Excavation, under certain conditions, except in cases of archaeological significance
- Restoration – returning fabric to a known earlier location
- Maintenance and rehabilitation works
- Development in accordance with a heritage (conservation) management plan endorsed by the Director of the NSW Heritage Office
- Minor activities with no adverse impact on heritage significance
- Work affecting non-significant fabric
- Removable temporary public events
- Removable temporary works required in response to an emergency involving risk or injury and/ or risk to property

All other works to comply with the assessments, criteria, policies, and guidelines of this Heritage Management Plan.

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<sup>55</sup> NSW Heritage Manual  
Suters Architects  
In association with  
Dawbin Architects  
Heritage Consultants

## **Local Environmental Plan**

The Heritage Management Plan will also be legally binding under the Newcastle City Centre - Local Environmental Plan 2008 (LEP), which is currently in effect under the NSW Environmental Planning and Assessment Act 1979. This LEP contains provisions for the protection of listed heritage items that will have full legal effect in relation to the Fort Scratchley site following transfer of site ownership from the Commonwealth to the Newcastle City Council.

## **PART 9: CONSERVATION POLICY**

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### **9.1 INTRODUCTION**

Fort Scratchley Historic Site is a place of outstanding significance, valued for historic association and symbolism, ability to demonstrate aspects of its history and for the assemblage of an unusually large range of military technologies. The overall significance of the place owes much to the intact ensemble of military buildings and structures from a range of periods, and also to the fact that it is one of only two Nineteenth century closed coastal fortresses in New South Wales. The site has also been significant to the settlement and development of Newcastle. The significance of the site was established in the 1978 Fort Scratchley Report by Wilson and Davies for J Birmingham and by J. S. Kerr in the Draft Management Plan for Signal Hill 1979.

The significance of the Fort Scratchley site requires that any action at the place should have primary regard for retention of identified significance. Constraints identified as arising from the significance of the place should guide future conservation and management of Fort Scratchley. Similarly the identification of Fort Scratchley as a site of great significance suggests that conservation should be undertaken in accordance with accepted conservation principles. In Australia these are provided by the Burra Charter of Australia ICOMOS and its guidelines. Further, the established heritage value and special nature of the site is such that it warrants retention in public ownership and allocation of public resources for its care and conservation, notwithstanding the objective of the future custodians to achieve a level of self sufficiency through selective and appropriate commercial enterprise on the site.

There is also a range of other factors to be taken into account. The physical needs of the structure and relics on site must be given priority. Physical conservation work to date has involved repair of the external envelopes and reconstruction of interior and exterior fabric where necessary. The concrete has been treated and repaired and all exposed steelwork has been treated or replaced. Ongoing maintenance is a priority as is the problem of water ingress to the tunnels which has yet to be totally and satisfactorily addressed, and which will continue to be monitored and any consequences managed.

The introduction of new fabric and acquired materials and artefacts throughout the site which represent a variety of earlier periods also can have a misleading effect on visitors to the site. The reinstatement of former armaments from earlier periods needs to be done in such a way that existing fabric is respected and the new fabric is apparent to visitors, either because of signage and labelling or by a particular treatment, such as colour variation or descriptive plaque.

Other considerations which arise from the contemporary social value of the site relate to public information, access and communication. It is extraordinary that, despite the relative paucity of information and promotion, Fort Scratchley prior to closure for the current refurbishment attracted 65,000 to 75,000 visitors per annum. This level of visitation is a clear indication of the social importance of the site and the interest in the site by the local community and its potential for increased visitation. Communication about the site itself and general presentation of its history and significance through appropriate interpretive media are consequently identified as major requirements, and this is addressed in the parallel Interpretation Strategy by ICS.

The appropriate future use of the Fort Scratchley Historic Site is a major factor in developing an effective conservation and heritage management policy. The aims of the Fort Scratchley Historical Society as the principal user group must be considered in the

future management of the site, however the society is a voluntary organisation and therefore continuity and stability of membership is a potential problem.

It is essential that Newcastle City Council, as the new owner, manager and custodian appoints one officer as a single point of contact and managerial control, with suitable resources ( Site Manager, administrative support, delegated authority and funds) to direct and oversight the input and work of suitably qualified and experienced specialists to curate and maintain the historic site and museum. Tasks would include cyclical maintenance, monitoring the application of the Heritage Management Plan and its policies, managing the acquisition or inclusion of new exhibits, managing the next phases of the development, installation of interpretive devices and ongoing community liaison with respect to the Fort Scratchley Historic Site.

It is appropriate that use of the Fort Scratchley Historic Site focuses on presentation of the site itself and its history as the overriding priority. Themes relating to broader military history and reference to other topics relating to Newcastle and servicemen from the local community should be included only if relevant to Newcastle's military history, and only if this is likely to broaden the attraction of the fort to visitors. Many of the spaces and structures should be presented in their own right as components of the history and development of the Fort. Although the guns are a major attraction to the site, the military history of the site and armaments should not be allowed to subsume the earlier history of the site.

Much of the original fabric in the buildings of the fort required substantial reconstruction after the depredations by the Army during the abandonment of the fort as well as the later damage by vandals. Although this intervention has little effect on the overall significance of the site, it has implications for the extent of physical intervention which can be condoned in order to reconstructed fabric.

## 9.2 GENERAL POLICY STATEMENT

This HMP has determined that the Fort Scratchley Historic Site is an item of outstanding environmental heritage value which has aesthetic, historic, scientific/technological and social value for present and future generations. The primary significance of the place derives from its role in the early development of Newcastle and its ability to demonstrate the advances in military technology during the late nineteenth and early twentieth centuries.

The following general principles will guide the formulation of policies for future heritage management and conservation of the site and its component parts:

### General Principles

- Fort Scratchley Historic site should be retained and conserved in accordance with the Burra Charter of Australia ICOMOS and its associated guidelines.
- Fort Scratchley Historic Site should be retained in public ownership and managed as a single entity. The primary objective should be to enhance the military heritage of the site by explaining the history and significance of the Fort, supported by interpretive displays which demonstrate the functioning of individual components.
- The site's significance in Newcastle's earlier history (penal settlement, coal mining and port activities) should be presented and interpreted for the visitor at the site.

- Management of Fort Scratchley Historic Site should have primary regard for physical conservation and interpretation. The site should become financially self supporting however it should not be required to yield a return on funds invested.
- Day to day management and operation of the site should be undertaken by the Site Manager provided with appropriate resources. This Manager will need to consult with suitably qualified and experienced specialists, for example conservators, curators and tradespeople. The appointed Manager will be the single point of contact for site use proposals and site management. The involvement of the Fort Scratchley Historical Society members and other volunteer resources will be essential to the successful operation of the site.
- Overall management responsibility will rest with Council. However, an advisory committee should include representatives from institutions or groups with legitimate interests (Newcastle City Council, Fort Scratchley Historical Society, commercial and tourist interests in Newcastle and the Newcastle community).The Site Manager may seek advice from this representative committee.
- An operational management committee should be appointed to support the Site Manager in managing day to day activities on the site, monitor and arrange ongoing maintenance. The committee should be coordinated by Council.
- Management of the Multi Purpose Centre should be the responsibility of the Council appointed Site Manager. The commercial catering lessee/ operator contracted by Council for the Multi Purpose Centre will also be bound by the policies of this Heritage Management Plan as they carry out their activities and operations at the Fort.
- All buildings, structures and landscape elements in the inner fort precinct should be retained and conserved.
- The grounds of Fort Scratchley should be managed as an integral part of the place. The bare open nature of the setting should be maintained although some former elements may be introduced for interpretive or operational reasons. New elements should only be introduced where essential for the operation of the place.
- Significant views to and from Fort Scratchley should be maintained and opportunities should be taken to enhance them. Significant views include those to and from Newcastle City and Newcastle South, the mouth of the Hunter River, Nobbys Headland, Macquarie Pier and within the gun arcs of fire out to sea.
- The fabric of built elements should be maintained and, where necessary, preserved and restored. Stabilization of elements which are under threat should be the major priority. Missing elements of fabric which are considered to be significant may be reconstructed but no hypothetical reconstruction should occur.
- Adaptation may occur to assist in interpretation of the operation of the place. Intervention in significant fabric should be minimal and reversible wherever possible.
- Collections of moveable artefacts which are currently part of the place or associated with it should be curated and conserved in an appropriate manner.
- The Fort Scratchley Historic Site should be interpreted in a manner which presents its significant attributes, particularly all major phases of its history and development.

- As a general principal, the inner fort precinct shall remain intact in its present configuration. Buildings, structures and spaces of the highest level of significance and interest (Grading of significance 1 or 2) should be made available for interpretation of the significance of the place. New development under certain circumstance may be permitted only within the outer fort precinct. Spaces not essential to the interpretation programme may be used for operational purposes or made available for concessional use. Interpretive needs should take priority over operational or concessional uses.
- The management needs at Fort Scratchley should be accommodated within existing buildings in the inner fort precinct, and new structures should not be erected within this area. Support facilities and new structures may be permitted in certain areas of the outer fort precinct, strictly in accordance with the policies of this HMP. The Manager may seek advice from the committee of interested parties on these matters.
- Visitor numbers, visitor profiles and management impact on Fort Scratchley should be formally monitored and the results used to modify management practice.
- Existing data, including previous reports, historical information and management information should be consolidated, reviewed and held on site for reference and management purposes, as well as becoming a base record for future conservation and interpretation actions.
- Following endorsement by the NSW Heritage Office, a copy of this HMP should be lodged for permanent filing with NSW State Archives.
- A copy of this HMP should be held on site and made available to interested parties, and a copy should be lodged with public repositories in Sydney and Newcastle and made available on the Council's website..
- This HMP should be reviewed and updated whenever there are other major changes to the circumstances of the place, such as changes in ownership or leasing. The conservation policies outlined in this Heritage Management Plan should only be varied following a formal review undertaken at the request of the authority or organisation responsible for the place. Otherwise the HMP should be reviewed every five years.
- For the long term effective management of heritage on this site, the future managers should prepare a detailed implementation schedule on the basis of this Plan, to ensure ongoing maintenance and management retains the significance of the site and its component parts at all times.
- As a general management principle, ALL proposals and work that will change existing conditions must be preceded by a detailed archival recording, (in accordance with NSW Heritage Office guidelines) in the form of measured drawings and photographic record of existing conditions and configuration of physical fabric, before and after the work is carried out.

## 9.3 SPECIFIC POLICIES

### Future Conservation and Upgrade Policies

Future programs for conservation should be based on the priorities outlined in this Plan. Work should be carried out in accordance with the following Policies under the following categories:

**Policy 1.1:** *The future conservation of Fort Scratchley both inner fort and outer fort precincts indicated on the Significant Curtilage Plan, Figure 1.1 (hereinafter referred to as 'the place') should be directed towards maintaining and interpreting its heritage significance in accordance with the principles of the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter).*

**Policy 1.2:** *The significance of the place should be made clearly evident to the observer and the means of interpretation should be compatible with the retention of that significance.*

**Policy 1.3:** *The Statement of Significance together with recommendations for specific items contained in this Part should be accepted as the basis for future conservation.*

**Policy 1.4:** *The conservation of all elements of a high degree of significance should be a combination of both preservation and restoration. Accurate reconstruction may be permitted in instances where the integrity of fabric is compromised by deteriorating elements.*

**Policy 1.5:** *The conservation of elements with some significance should include preservation, restoration, reconstruction, and adaptation.*

**Policy 1.6:** *In some specific instances, limited adaptation and reconstruction may be allowed in accordance with the Burra Charter to allow and assist interpretation.*

**Policy 1.7:** *In some instances, elements of compromised significance may be reinstated to their original form and condition.*

Intrusive elements have been largely removed from the site during the recent redevelopment program. Nevertheless some elements remain on the site for which more appropriate outcomes should be considered. Examples include the anchor near the entry driveway and the sandstone blocks to the west of the bridge near the dry ditch. Other intrusive items may in future be found to be redundant as a result of improved technology and methods of access such as services pipes and conduits, excessive paving, redundant handrails and supports.

**Policy 1.8:** *Intrusive elements should be removed, and replaced with sympathetic alternatives where required for operational purposes.*

A program for conservation and maintenance of the building fabric should identify necessary upgrading works. Such work should not compromise effective and appropriate conservation in accordance with the Statement of Significance.

**Policy 1.9:** *The proposed work shall include upgrade works as required to meet current occupational, health and safety standards with respect to public buildings, staff amenities, and services.*



## Feasible Uses

### **Refer Recommended uses for Individual Spaces, Appendix 2**

**Policy 2.1:** *Fort Scratchley Historic Site should be managed as a place of cultural significance available for visitation, enjoyment and interpretation by the public. Any other use should be regarded as secondary to this primary purpose.*

**Policy 2.2:** *Conservation requirements and objectives should take precedence over all other considerations.*

**Policy 2.3:** *A combination of events from the regional community calendar, educational activities, special events and tourist oriented commercial concessions are identified as uses which are appropriate and compatible with the cultural significance of the place. Specifically uses which may be acceptable on site include: passive recreation, guided tours, talks, private functions including weddings, static and dynamic displays, food and beverage sales, souvenir and book sales, temporary exhibitions, management offices, equipment stores, workshops.*

**Policy 2.4:** *The use of the site should be supported by the Multi Purpose Centre as a facility for functions, conventions, conferences, weddings and other formal occasions. Community use of the site may be enhanced by opportunities of the unique scenic qualities and the heritage character of the fort site. (Refer Policies 19.1 – 19.5)*

**Policy 2.5:** *Spaces assessed with a significance rating of 1 or 2 (exceptional or high) should be used for interpretation of the site. Any other activity proposed should be considered only if it can be demonstrated there is no potential impact on significant fabric or spaces, arising from such activity.*

**Policy 2.6:** *Spaces assessed with a significance ranking of 4 (low) may be considered for essential management and operations purposes, but should otherwise be available for interpretation.*

**Policy 2.7:** *Spaces assessed with a significance ranking of 4 or 5 (low or none) may be used for management, interpretation, concession or storage purposes.*

**Policy 2.8:** *Spaces and intrusive elements with a significance ranking of 6 (intrusive) should be removed, or be replaced with sympathetic alternatives.*

**Policy 2.9:** *Levels of visitation should be monitored and controlled to ensure that use of the place does not result in damage at unacceptable levels of wear to significant elements.*

## Ownership and Management

**Policy 3.1:** *Fort Scratchley should remain in public ownership under the control of an authority with skills and experience in the management of historic sites.*

**Policy 3.2:** *A Council officer should be appointed as Site Manager for Fort Scratchley, whose primary responsibility is the care and presentation of the Fort Scratchley Site. The job specification of the manager should be broadly defined to manage site administration, day to day operations, visitor guiding, exhibits and to seek advisory committee input.*

**Policy 3.3:** *The day to day operation of the place should be the responsibility of the Council appointed site manager in consultation with an Advisory committee and specialist consultants.*

**Policy 3.4:** *A Fort Scratchley Management Advisory Committee should be established and should include representation from other Newcastle City Council departments, Museum interests, commercial and tourist interests and the Newcastle community. The committee should include a representative from the existing Fort Scratchley Historical Society committee.*

**Policy 3.5:** *Other than legislative requirements, policy decisions and major initiatives should be decided by Council as the future owner of the site, following consultation with the advisory committee and after liaison with the NSW Heritage Office and other state or national stakeholders.*

**Policy 3.6:** *A manual of procedures for decision making and approvals should be prepared and adopted to ensure clarity in areas of responsibility and required consultative processes.*

## **Building and Development**

New development or activity at Fort Scratchley Historic site should only be permitted in accordance with this policy. The proposed Fort Scratchley Advisory Committee should have a consultative role in the determination of appropriate new activity.

**Policy 4.1:** *All buildings, structures and landscape elements in the inner fort precinct should be retained and conserved, and no new development will be permitted in this area.*

**Policy 4.2:** *New development will be permitted within certain areas of the outer fort precinct as indicated in the zoning diagram, Figure 9.1. Any new development or adaptive reuse will be carried out strictly in accordance with this HMP.*

*Zone 1 Clear open space, no built development, no new permanent structures,*

*Zone 2: No new structures or intrusive development, no external alteration to existing structures*

*Zone 3: Limited redevelopment potential. New structures permissible in certain areas under strict controls*

*Zone 4: Modifications only, outside view corridor*

*Zone 5: Redevelopment under strict controls regarding height, density and design*

## **Redevelopment and Adaptive Reuse**

The advice of the NSW Heritage Office should be sought prior to proceeding with proposals for new development at the site.

**Policy 5.1:** *Essential external works shall be strictly controlled to ensure compatible and appropriate design to minimise impacts on the fabric of the facades, and integrity of the structures.*

**Policy 5.2:** *Interior fitout and alteration shall be minimised and allowed only to the extent necessary to improve visitor access, staff management and interpretation. Internal fitout should be sympathetically conceived and reversible to minimise impact on significant fabric.*

## Permissible Development:

### NEW DEVELOPMENT, INNER FORT PRECINCT ZONE 2

The inner fort precinct is the most important in terms of significant and original structures. This precinct must be conserved and maintained in its present configuration. Intervention affecting original fabric is not permitted, except where unavoidable for essential services or provision of safety infrastructure for protection of visitors and accessibility to the site.

**Policy 6.1:** *Removal of, or alteration to original fabric is not permitted. Alteration to the exterior, extensions to buildings, or infill development will not be permitted. Limited and strictly controlled alteration to interior fabric and internal spaces will be permitted only with approval of the Site Manager after seeking comment from the Advisory Committee, and only as essential for interpretation of the spaces or sympathetic adaptive reuse of spaces to maintain the viability and ongoing usage. The Site Manager will verify that the proposed work is consistent with the requirements of all aspects of this HMP.*

**Policy 6.2:** *The extent of new pathways and ramps for easy access to all areas of the site shall be minimised and permissible only in areas where precedence for pathways and paved areas existed previously, such as the parade ground and barbettes structures. Access to pristine locations such as the outer casemate area, the searchlight post or to the east and south of the flagstaff shall have minimal impact on the visual character of the structures and shall be reversible.*

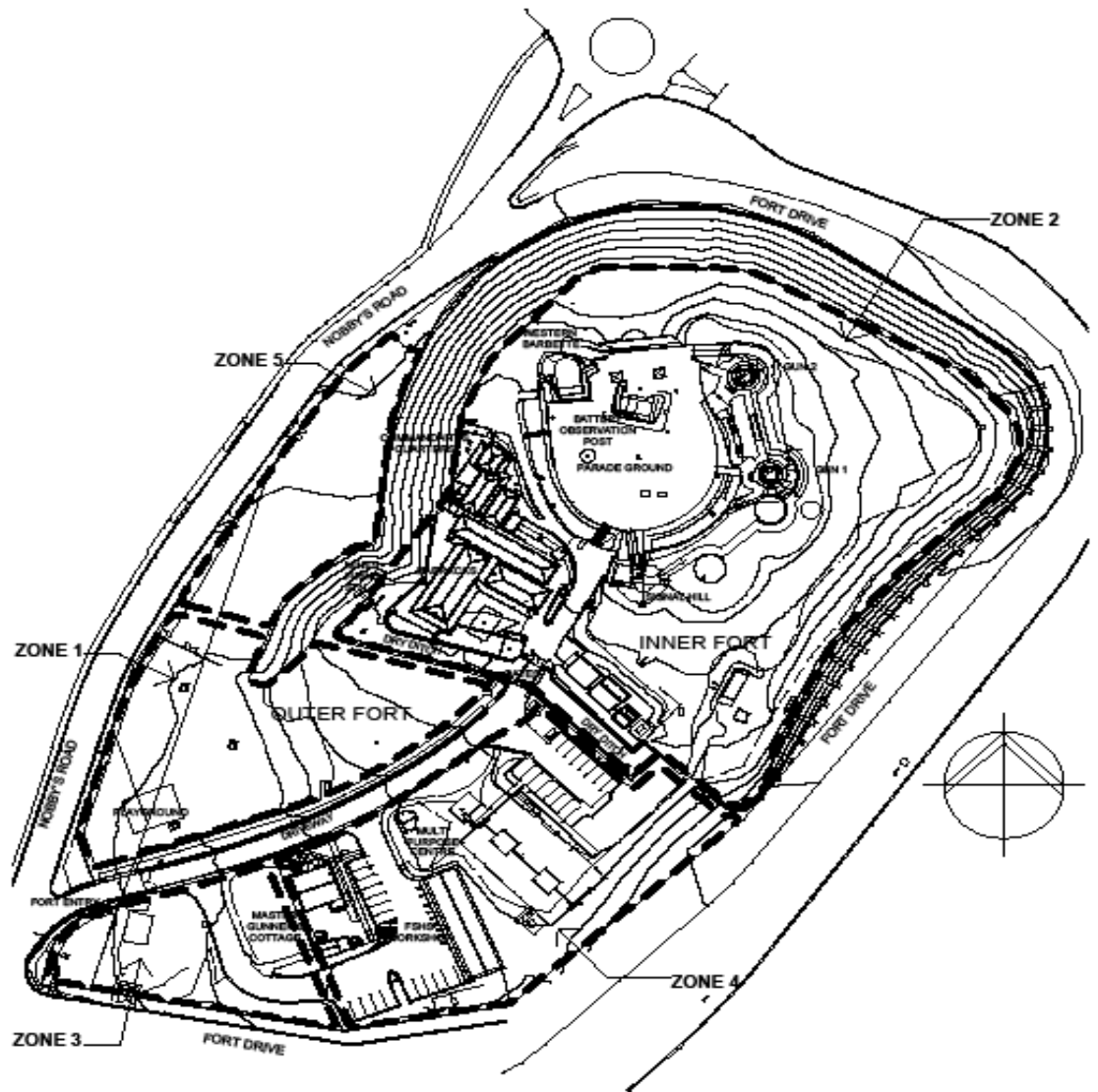
**Policy 6.3:** *The extent of new handrails for easy access to all areas of the site shall be minimised and are permissible only where absolutely essential for safety and accessibility. The design of handrails shall not impact on views or vistas, they should maintain transparency of view lines. Differentiation between new handrails and old military style handrails shall be clearly evident in the design.*

### NEW DEVELOPMENT, OUTER FORT PRECINCT ZONE 4: Multi Purpose Centre and Transport Garage

These new structures were completed in 2008 as part of the current upgrading program of essential infrastructure and support facilities for a sustainable economic future for the site. They were constructed in Zone 4 outside view corridors and now represent full development of this area of the site. Refer Figure 9.2. Zones 3 and 4 historically have been the location of several generations of redevelopment, and a variety of timber framed and brick buildings have been built on either side of the driveway approaches to the Fort since the establishment of the permanent structures of the Fort in the 1880's.

**Policy 6.4:** *Redevelopment in the Zone 4 area shall be restricted to modification or low key infill development of the affecting the new structures only. The undeveloped curtilage to the Master Gunner's cottage, on to the dry ditch extents and to the views of the fort walls will remain unaffected by new development.*

**Policy 6.6:** *Interpretive devices should be included to provide information about past history of the precinct, fort operations and structures previously located in the vicinity. Refer ICS Heritage Interpretation Work Plan.*



- ZONE 1:** Clear open space, no built development.  
No new permanent structures.
- ZONE 2:** No new structures or intrusive development.
- ZONE 3:** Limited redevelopment potential.
- ZONE 4:** Modifications only, outside view corridor.
- ZONE 5:** Potential redevelopment site.

**Figure 9.1. Zones of Permissible Development**

### NEW DEVELOPMENT , OUTER FORT PRECINCT ZONE 3

The lower area of the outer fort precinct is the main driveway entrance to the site, strategically important for views of the headland and vistas of the fort structures. This area has been the site of many structures in the past including two drill halls and later a timber framed Army ambulance station which survived until 1972. The site has high interpretive value for the past layering of development, of which the only physical evidence remains are footings and paved areas, and the Master Gunner's cottage.

**Policy 6.6:** *The open areas will remain undeveloped except for passive recreation and essential services such as parking. The lower driveway approaches to the Cottage will remain unobscured and current view lines to the Fort will remain unaffected.*

**Policy 6.7:** *The design and detailing of gate structures and fencing is based on traditionally detailed perimeter fencing elsewhere on the site. Structures will be small in scale to minimise impact on views and vistas, and signage and notice boards will be low key and have minimal impact in this open area. (Refer "fences" guidelines, Implementation Strategy, Section 10.3.)*

**Policy 6.8:** *Interpretive devices should be included to provide information about past history of the precinct and structures located in the vicinity. Refer ICS Heritage Interpretation Work Plan.*

### NEW DEVELOPMENT, OUTER FORT PRECINCT ZONE 1

This open area is important to the setting of the Fort and forms the western side of the entry driveway entrance to the site. It has been the site of many structures in the past, including married quarters and amenities buildings, the latter of which existed until 1972. The site has high interpretive value for the past layering of development, of which little physical evidence remains except for earthworks and retaining walls. The topography has been altered by landfill and terracing for the childrens' play area.

**Policy 6.9:** *The open area and barren nature of this area of the site should be maintained in accordance with the following policies for landscape. Development or structures of any kind are not permitted.*

**Policy 6.10:** *The existing play area may be retained in its present form, consistent with the simple utilitarian nature of the site and it continues to provide a safe, contained environment for passive recreation. Displays of military hardware or overt gestures of military symbolism should be avoided. Refer ICS Heritage Interpretation Work Plan.*

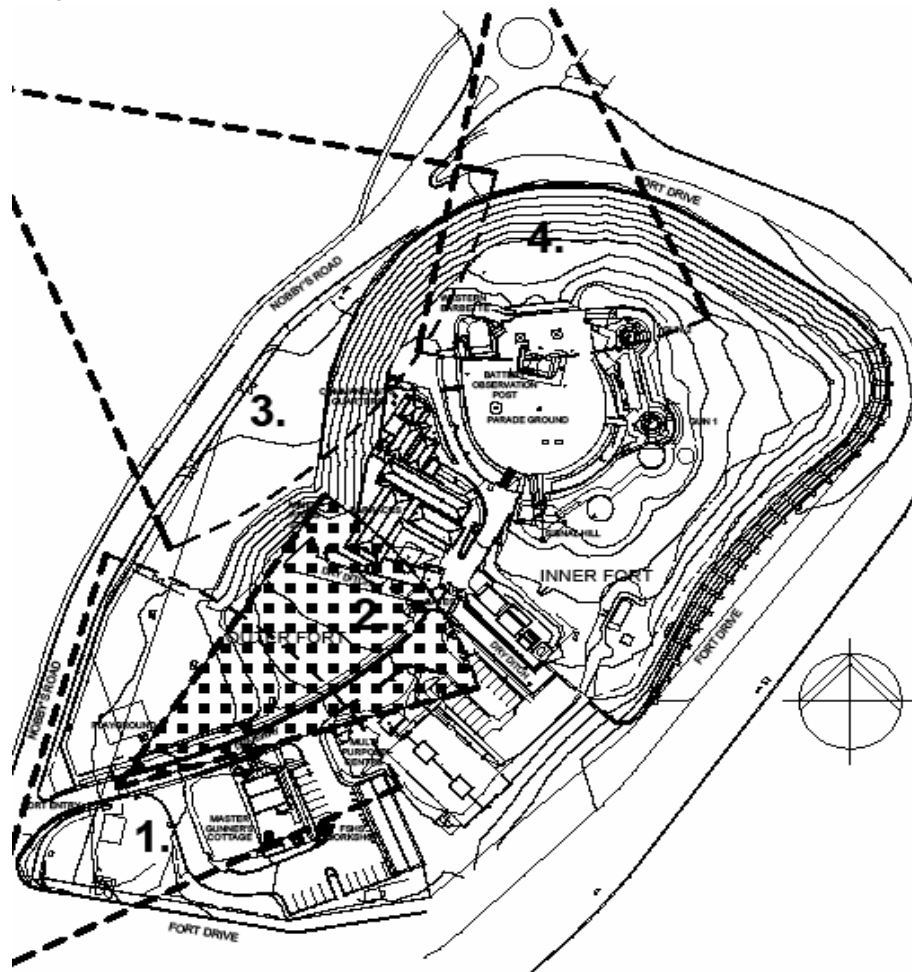
**Policy 6.11:** *Interpretive devices should be included to provide information about past history of the precinct and structures located in the vicinity. Refer ICS Heritage Interpretation Work Plan.*

### NEW DEVELOPMENT, OUTER FORT PRECINCT ZONE 5

The open area to the foot of the Signal Hill site, fronting Nobbys Road, beneath the Mines Firing Station was the site of the former SES complex and works depot (its last use). The site has potential for sympathetic redevelopment because of its tradition of buildings on the site and potential for minimal impact on significant fort structures and views to and from the site.

**Policy 6.12:** *The western precinct may be redeveloped with new structures of maximum two storeys in height, and footprint of development to be confined to the nominated area of this zone. The design of new structures should be traditional in character to impose minimal visual conflict with the hipped roof forms of the buildings within the inner fort precinct located high above this site. Selection of colours and finishes must not detract from the ramparts or the significant inner fort precinct.*

**Policy 6.13:** *Interpretive devices should be included to provide information about past history of the precinct and structures located in the vicinity. Refer ICS Heritage Interpretation Work Plan*



- 1: From the corner of Parnell Place and Stevenson Place.
- 2: From Entry Gates to Inner Fort and Flagstaff.
- 3: From Foreshore Park to Forts western elevation
- 4: From Macquarie Pier to the Forts Casemate and BOP.

**Figure 9.2. Established views of the Fort**

## Setting

The setting is an important component of the significance of the site as a whole. The identity of the fort as a coastal defence establishment is enhanced by the prominence of its location and the intrinsic relationship between the Fort, the city, harbour and the coast

### Refer photos, Section 4.10

**Policy 7.1:** *The setting of Fort Scratchley should be conserved and managed to ensure retention of its identified values.*

**Policy 7.2:** *Development controls should be introduced in Council planning schemes affecting surrounding areas to ensure views to and from Fort Scratchley Historic Site are protected. The vistas 1, 2, 3, and 4 as indicated by **Figure 9.2** should be maintained in the future.*

## Landscape

The barren nature of the landscape was essential to the operations of a coastal fort and is therefore an essential element of the heritage character of the site. New planting should be restricted to low level landscaping, using low shrubs and ground covers including native species of dunal grass, only as necessary to suppress Bitou and other weed infestation. Open lawn areas should be maintained in their present form.

**Policy 8.1:** *The Fort Scratchley Historic Site should be managed as a cultural landscape and setting for the Fort complex.*

**Policy 8.2:** *Weed control should be a major objective in the selection of species for planting anywhere on the site.*

**Policy 8.3:** *Landscape elements, including fences and paths may be reconstructed consistent with known historic features, if this is useful for operational purposes or interpretation.*

**Policy 8.4:** *Totally new elements, such as paths, fences or outdoor furniture should only be constructed if demonstrated to be essential for operational purposes or access for interpretation. Such construction should be reversible wherever possible.*

**Policy 8.5:** *New planting and landscape elements should be low level compatible with the barren windswept character of the site. Planting should minimise impact on significant view corridors, in accordance with **Figure 9.2***

**Policy 8.6:** *Existing high planting to base of wall to the western precinct ( eg leptospermum) should be removed or maintained at low level to minimise impact on retaining wall. New planting permitted to Zone 5, maximum 8 metres high.*

**Policy 8.7:** *Develop an effective weed management policy to remove all Bitou bush and stabilise all slopes after removal with suitable native ground covers or dunal grass.*

**Policy 8.8:** *The option to establish cottage gardens at the Master Gunners cottage and Commandants cottage should not be excluded, with approval of the Advisory Committee.*



## Parking

Provision of adequate on site parking for visitors and staff will increasingly impact on the Outer Fort Precinct with potential to detract from views to and from the fort and visual prominence from the entry driveway.

**Policy 9.1.** *Parking shall not be permitted at any time within the Inner Fort Precinct, and should only be accessed by vehicles for delivery of out-sized items, at strictly controlled times outside hours of opening to the public.*

**Policy 9.2.** *Parking shall be managed in a manner which has minimal impact on significant elements of the inner and outer fort precincts.*

**Policy 9.3.** *The existing parking area adjacent the dry ditch has been re-established with a turfed buffer zone between the edge of the dry ditch, and distance increased from the driveway. Parking should be confined to the eastern side of the driveway. The drain of the former mess hall has been retained in the new work.*

**Policy 9.4.** *Limited parking only is available in the vicinity of the MPC, and future areas for parking should be located between the MPC and Fort Drive. Additional parking is also available within the former SES area*

**Policy 9.5.** *Parking will be permitted only in designated areas and shall not be permitted on grassed or landscaped areas. Parking will not be permitted on the western side of the driveway.*

## Built Elements/Fabric

Conservation and intervention affecting existing fabric shall conform to the following policies.

**Policy 10.1:** *All existing elements should be retained and conserved except where an individual endorsed conservation policy determines otherwise.*

**Policy 10.2:** *Significant fabric (assessed as exceptional, high or moderate significance) should be retained in situ and maintained, preserved and restored. Hypothetical or conjectural reconstruction should not occur.*

**Policy 10.3:** *Fabric with an assessed low significance rating or less may be removed if necessary for operational reasons, or alternatively may be restored or adapted if this will contribute to enhanced significance on the site.*

**Policy 10.4:** *Fabric with no heritage value may be retained or removed.*

**Policy 10.5:** *Fabric rated as intrusive should be removed except where retention is required for operational reasons.*

## Intervention in Fabric

Options for adaptive reuse of individual elements are included in Implementation Guidelines for Individual Elements, Section 10.4.

**Policy 11.1:** *Intervention affecting significant fabric (assessed as exceptional, high or moderate significance) should be avoided wherever possible, and should be minimal and reversible if essential for operational reasons..*

**Policy 11.2:** *Fabric with a lower relative value should be disturbed in preference to fabric with a higher relative value.*

**Policy 11.3:** *New fabric introduced in significant elements or spaces should be of a form, material and finish that respects the existing, but should be discernible on close inspection as new work, or via inscription in the fabric.*

**Policy 11.5:** *Repair of original significant fabric is preferable to replacement with new fabric.*

**Policy 11.7:** *Intervention in significant fabric and/or introduction of new fabric may be permitted where required to ensure the continuing safety of the item or where such intervention is demonstrated to be essential for operational requirements.*

**Policy 11.8:** *Where possible existing original or period colour schemes should be retained and preserved.*

**Policy 11.9:** *Where new materials and finishes are introduced, the physical evidence of the former finishes should be retained beneath for later interpretation .*

**Policy 11.9:** *The extent of new fastenings to significant fabric, in particular where fragile and unstable fabric is involved (such as plaster walls and lath, plaster ceilings, joinery mouldings etc) should be minimised and alternative forms of attachments investigated to minimise intervention into significant fabric and finishes.*

## **Intervention in Unrestored fabric**

The recent redevelopment program has comprehensively included most elements of the site and upgrading of fabric. Certain areas of high significance have been specifically retained in their original condition and state prior to the conservation work, to assist the further investigation and interpretation of these spaces. Spaces include the Gunners Ablutions, the Laboratory, shell lift to GE 1, a section of tunnel behind Casemate no 1, and the Mines Observation Post, and the ground floor level of the BOP. In addition some sections of fabric have been left unfinished to enable interpretation of construction materials, construction methods, finishes and colours. These include Barracks North, the old Guard House and of course, numerous examples throughout the site of the military signwriting and building designations.

**Policy 12.10:** *The extent of intervention involving original unrestored fabric, shall exclude those areas designated with a high level of significance. Fabric in these areas shall be protected from damage and visitation not allowed without supervision.*

**Policy 12.11:** *Unrestored areas of low significance may be redeveloped as additional amenities or support facilities and include the NCO's Ablutions, the Ablutions to the rear of the Commandants Cottage (Servants Room).*

## Services

**Policy 13.1:** *Wherever possible service conduits and trenches should follow existing lines or should be located through deposits or features which are disturbed or are of the lowest possible significance.*

**Policy 13.2:** *Special care should be taken in the location, siting and installation of any new services.*

## Reinstatement of Former Armaments/ Ordnance

The reinstatement of former armaments from a period earlier than the existing layout of the Fort poses a special problem in terms of presentation to the public and should only occur where considered essential for interpretation of the site.

**Policy 14.1:** *The armaments must be displayed without alteration to the existing physical layout of the Fort. For example, older style guns from the Fort should not be displayed in situ if their original emplacement has subsequently been modified to accommodate a newer style of gun.*

**Policy 14.2:** *The period of the armament must be clearly indicated by a plaque or signage and displays. Subsequent changes to the fabric of the location of the armament which were carried out to accommodate new technological advances in armaments must remain apparent to visitors to the site and should be interpreted. In some cases armaments may be better presented out of context, rather than giving a misleading impression. Refer ICS Heritage Interpretation Work Plan*

## Interpretation

A comprehensive Interpretive Strategy for the Fort Scratchley Historic Site was prepared for the Commonwealth and stakeholders by ICS, in conjunction with this HMP. Interpretation is considered to be an essential element in the future success, conservation and management of the Fort Scratchley Historic Site. Interpretation assists in raising community appreciation of the significance of the place.

The presentation of the Fort Scratchley Historic Site should emphasize values identified in the statement of significance, particularly the early settlement period and the military technology, but should include all phases of the history of the place.

**Refer ICS Heritage Interpretation Work Plan: Executive Summary, Implementation Section 10.3**

**Policy 15.1:** *The Interpretive strategy for Fort Scratchley shall be implemented on the basis of the Heritage Interpretation Work Plan by ICS*

## Acquisition of Collections, Materials, Displays, Guns etc.

A specific policy of acquisition for the purpose of exhibition or displays at the Fort Scratchley site should be formulated by the Site Manager in association with a consultant curator and the Advisory Committee, and should be adhered to in all future acquisitions. Items (from collections) to be displayed must be in accordance with the *Exhibition Strategy for Moveable Heritage*, and the enhancement of significance, as defined by this Heritage Management Plan.

**Policy 16.1:** *The collection policy for Fort Scratchley shall be implemented on the basis of the **Collection Management Policy for FSHS Collections by ICS***

### **Artefact displays**

An Exhibition Strategy for the Fort Scratchley Historic Site was prepared by ICS as a document to guide the location, design, fabrication, and installation of displays of artefacts (moveable heritage items). It includes guidelines on themes to be used, where particular themes should be exhibited and the detailed methodology of selecting a theme and selecting appropriate artefacts and achieving consistency of style and message. It addresses both permanent and temporary displays.

Just as the Fort provides physical evidence of the site's history, so also do artefacts and memorabilia. Items on display provide a focal point upon which broader themes may be attached, to advance a greater appreciation of the past. A focal point then can become a springboard for the expansion of themes and ideas, allowing the audience to fully explore the stories of both the site and the artefacts.

It is imperative that the approach and execution of artefact displays complement the style and method of storytelling around the site. It is equally important that stories are told in appropriate spaces across the fort.

**Policy 17.1:** *The display and exhibition strategy for Fort Scratchley shall be implemented on the basis of the **FSHS Site Exhibition Strategy for Moveable Heritage by ICS***

**Policy 17.2:** *Any artefact display proposed for the site should follow the guidelines as provided in the Exhibition Strategy for the site*

**Policy 17.3:** *Items or material should only be acquired if intended for exhibition or display if a definite relationship with Fort Scratchley exists or if they can be used to illustrate a significant aspect of the development of the Fort. Material which has relevance to the military heritage of Newcastle or the ex-service personnel from the local community may be considered on merit as assessed by the site manager and advisory committee, providing the material does not detract from the overriding theme of the Fort collection, **the specific heritage of Fort Scratchley**.*

**Policy 17.4:** *Missing elements of fabric of relics or collections, which are considered to be significant, may be reconstructed, but hypothetical reconstruction should not occur.*

### **Storage of Collections on Site**

**Policy 18.1:** *Collection material shall not be stored in any space within the inner fort precinct, except in the following circumstances:*

- *Transition of displays between periods of exhibition, for temporary period only*
- *Storage of consumables essential for the museum exhibits or staff*
- *Temporary storage for operational reasons*

**Policy 18.2:** *Storage within the outer fort precinct shall be confined to the new FSHS Workshop, and then only to the extent that operations within the workshop are not constrained by such storage.*

## **Use of the MPC and Other Concession Activity on Site- Operational Constraints**

The operation of the MPC or other commercial concessions must be compatible with all other activities within the Fort and must not detrimentally impact on the heritage significance of the place.

**Policy 19.1:** *Activities occurring within MPC should not interfere with the quiet enjoyment and appreciation by other visitors to the fort.*

**Policy 19.2:** *Any proposal for advertising or promotion involving, permanent signs, temporary banners, or temporary structures relating to MPC, café, shop or other commercial concessions on site, must have no impact on significant fabric or detract from the ambience of the place. Any such proposal must be approved by the Site Manager, in consultation with the management committee, if issues of potential impact arise.*

**Policy 19.3:** *Activities and functions held in the MPC must have no permanent impact on the inner fort precinct. Low impact or temporary activities originating with the MPC may have access to and use areas of the inner fort precinct, providing such use positively promotes the heritage value of the fort and enhances the significance of the place. Examples may include photographic venues for weddings or other formal occasions and guided tours of the fort in conjunction with functions held at the MPC.*

**Policy 19.4:** *Peripheral activity associated with the MPC such as parking, management of coaches, external loud music or amplified sound must have no impact on the experience enjoyed by visitors to the inner fort precinct.*

**Policy 19.5:** *Activity within the MPC and Workshop buildings will remain confined to the interior of these spaces, and associated activities within the inner fort precinct will be restricted to temporary, low impact activities which enhance the presentation of the site and respect the cultural heritage significance of the site.*

## **PART 10: HERITAGE MANAGEMENT STRATEGY**

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### **10.1 INTRODUCTION**

Heritage management strategies should take account of the various factors identified in the preceding policy section, including opportunities and constraints. Management of the site should be based on desirable commercial outcomes that enable financial self sufficiency for future maintenance and responsible operation of all areas of the complex.

Future management of the site is conditional on minimising impact on heritage significance.

In summary, the preceding policies require that the site be conserved and developed in a suitable manner in regard to short-term and long-term outcomes for future use.

The preceding policies are based on a number of fundamental principles:

- The appropriate management of cultural heritage values through responsible conservation and maintenance strategies
- The assemblage of all elements of the site including structures, buildings, landscape elements and armaments, as a total entity, has greater significance than the sum of individual parts
- The significance of the site is also based on intangible qualities including use, association and meaning
- Decisions regarding management of site must be based on an understanding of heritage values, and the contribution of individual elements to the significance of the site as a whole
- Operational or maintenance actions should minimise impacts on heritage values
- The history and military heritage of the Fort Scratchley Historic Site should be communicated to visitors and the wider community.

### **10.2 HERITAGE OPPORTUNITIES**

#### **Interpretation**

**Refer to ICS Interpretation Work plan.**

Interpretation of the history of the site would contribute to the reading and understanding of the place. Interpretive elements should be clear and unobtrusive, and explain the former functions of Fort Scratchley in the context of the development of the site and its role in the coastal defence of NSW, and other significant themes important to the development of Newcastle including the maritime and coal industries.

## Promotion and Public Awareness

The site and facilities available should be actively promoted within the community, as compatible and appropriate usage will increase the level of public awareness of the heritage values of the site and potential for increased tourism for Newcastle.

## Development Options

New development has potential to impact on elements of significance and important views to and from the site. New construction and redevelopment of existing elements must be strictly controlled in accordance with the policies of this Plan. In general, new development will be restricted to work of the following nature, essential for enhancing significant elements and in the provision of facilities for low impact and appropriate usage of the site:

- Reconstruction of former elements: sentry boxes, flagstaffs etc
- Recreational facilities
- Support facilities for visitors, staff and volunteers, including amenities, catering etc
- Removal of non-significant elements and replacement with new elements that will contribute more positively to the site

## The Setting, Boundaries and Curtilage

The unique setting and topographical location of the site is fundamental to the heritage significance of Signal Hill and the Fort Scratchley complex, enhanced by views and vistas to and from the site. The historical associations extending to the 1820's add a layering of important intangible qualities to the cultural significance of the site, and the structures remain as clear physical evidence of the nature of the development of the site.

## 10.3 IMPLEMENTATION GUIDELINES FOR INDIVIDUAL ELEMENTS AND SPACES

Refer to Recommended uses for Individual Spaces, Appendix 2

The following section identifies specific implementation guidelines and actions applicable to individual structures, spaces and elements within Fort Scratchley Historic Site.

All actions shall be carried out in accordance with the preceding mandatory policy statements, and significant fabric will be retained, conserved and stabilized. These guidelines provide a structured approach to the implementation of conservation policies, taking account of the practical issues of future use options for the site and other external influences. This is not an exhaustive account of all possibilities for implementation, but is intended as a set of recommended guidelines for appropriate conservation and future use options for individual elements of the site.



## **THE INNER FORT PRECINCT – THE BATTERY COMPLEX:**

### **The Gun Emplacements**

This area should be used to interpret the construction, history and operation of the fortress and to contrast the different technologies which were formerly housed in the installation.

All relics or artefacts uncovered during current or past conservation works should be identified and interpreted.

Particular care should be taken to conserve signage, military and wartime graffiti and evidence of former equipment and fittings.

Specific issues applicable to the component parts of the Battery Complex include the following:

#### **Barbettes Code 3250**

The barbettes should remain intact and undeveloped for interpretation and public visitation. Safety and access are major considerations in terms of infrastructure alterations, and much work including handrails, asphalt paving and concrete paving has been carried out during the recent redevelopment program. Any future installation for access should ensure minimal detrimental visual impact on the fabric, all of which is highly significant.

Extensive remedial work has been carried out in the current conservation program and during 1980 to seal the entire concrete structure from water penetration. Water ingress throughout the life of the fort has been a destructive force causing corrosion to reinforcing steel, iron rails and iron and steel fittings. The situation was exacerbated during the hastily constructed fortification works of World War II using porous and defective concrete. Water penetration is now greatly reduced, however any damp in the barbettes, casemates and tunnels must be monitored regularly in the future and addressed to minimise the resulting deterioration of fabric. Open barbettes must be maintained in secure and safe condition, and effectiveness of drainage constantly monitored.

The new handrails installed around the barbettes area are considered a necessary precaution to improve public safety but are presently considered intrusive by virtue of their highly polished appearance. It is anticipated that with natural exposure to the elements, the surfaces will weather in time. Should this not eventuate within the following year, the stainless steel should be treated to achieve a more subtle appearance, whilst ensuring that the new handrails can still be readily differentiated from the existing painted handrails around the parade ground.

#### **Casemates Code 2410, 2420, 2430**

The enclosed casemates have similar issues with dampness as the barbettes, but recent work has improved the conditions in this area. Maintaining the condition of whitewash will continue as a maintenance consideration in the future.

As for the barbettes access is a major issue, and disabled access has been provided by a retrofitted stair chair at the western entrance steps to the casemates. Although disabled access should be facilitated where possible, by virtue of the fort's original construction there are some areas where access cannot be provided, as to do so would require installation of ramps, inclinators or widening of openings in a manner resulting in unacceptable intervention in original fabric. Consistent with the conservation policies described in this HMP, irreversible damage to original fabric of exceptional significance

would be considered unacceptable, even if proposed to provide improved public access to these areas.

#### **Tunnels, Magazines and Ammunition hoists Code 2310 etc**

The fabric of the tunnels is fragile and should remain intact and undeveloped for interpretation and public visitation. The underground and enclosed battery structures are vulnerable to damage from visitors and some areas have restricted access. Access should only be allowed in controlled and guided groups to ensure protection of fabric, and fittings and minimise risk to visitor safety. Special one-off functions, displays and exhibitions have been successful in the past and should continue to be allowed under supervision.

Similar issues as the casemates apply to the tunnels. Specific issues include adequate lighting, the suitability of replica lamps for adequate lighting, the appropriate management of modern power conduits. Protection of highly significant joinery in the magazine area and cosmetic restoration of the ammunition hoists will remain a priority for management of this area.

Opportunities exist for active demonstration of ammunition handling in the magazines and supply to the gun emplacements. At least one of the shell lifts should be restored to working order. Lamps should be functional to demonstrate the limited lighting levels available.

#### **Gunners' Mess Code 2150, 2140**

The mess area is an 80% reconstruction of the fixed tables and bench seats in this area installed during the 1981 conservation works. It was based on remnant joinery elements remaining on site. It is an important interpretive space indicating the rest and recreation activities of the gunners

#### **Artillery Store Code 2110**

This strategically located store at the entrance to the tunnels is useful as a base for volunteers and staff managing access and tours to the tunnels. In the past it served as a museum shop and continued use as such is appropriate. Remnant fittings and army signwriting should be retained and conserved.

#### **Battery Observation Post Code 3210**

The interior spaces should be used for interpretive purposes and should be freely accessible to visitors to the site. The external stair will however preclude disabled access to the upper level. Original joinery benches and elements of the depression range finder equipment have been reconstructed to demonstrate the functions of the BOP.

Bottom hung outward opening bronze window sashes were partly reconstructed based on original remnant elements.

The BOP should be recreated with reconstructed interior fittings and communications as a WW1 and WW2 command centre for the fort's 6" guns and searchlights. Fort Scratchley is the only site in Australia with a complete and potentially functional coastal battery.

### **Parade Ground Code 3110**

The parade ground should be freely accessible to all visitors to the fort to enable an understanding of the fort layout and functions and to enjoy the spectacular views over the ocean, the harbour entrance and the city.

Any relics or indications of the former Depression Rangefinder (3 locations) should be preserved and interpreted. New concrete paved areas and pathways should be restricted to avoid obscuring evidence of past associations. The parade ground should be retained as an unobstructed open area suitable for ceremonial occasions and re-enactments of traditional events, and will be closely associated with the recently re-erected flagstaff. The Commanding Officer's stairway should be fully reconstructed to improve access between the driveway and the parade ground.

### **Flagstaff Code 3330**

The 1983 replica of the central flagstaff has been refurbished and re-erected during the 2008 works program. All running rigging should be reinstated as a dynamic and fully operational facility for use on ceremonial occasions. The flagstaff should be available for traditional events and military celebrations and will frequently supplement activities involving the parade ground.

The replica signal mast to the Battery Observation Post should be upgraded in accordance with photographic evidence of the original, to further enhance the ceremonial and communications significance of the signal mast, the flagstaff, and the parade ground.

## **THE INNER FORT PRECINCT – THE BUILDINGS**

### **The Barracks**

All fabric within these spaces should be retained, preserved and stabilized. Evidence of all phases of the history of the spaces, including the recent reconstruction work should be retained. Colour schemes interpret the original finishes, and a section of unrestored wall surface has been retained as evidence of the layering of colours and finishes to the interior.

#### **Barrack Building 21 ( Code 1230 )**

This space appears best suited to permanent or visiting exhibitions for the museum, as the two rooms are of adequate size for such purpose. The spaces may be subdivided by temporary screening and displays, however the original and reconstructed features of the building should not be obscured. Through access should be allowed via the hallway to the western verandah for the vistas to the city and harbour.

An alternative suitable purpose for the two barracks spaces is as a venue for functions. The large spaces are ideal for seminars, meetings, conferences, reunions or other presentations, with the facility of the verandah for outdoor functions or limited catering.

#### **Canteen and Stores– Building 22 ( Code 1240 )**

In recognition of the significant role which the site plays as a viewing area it is recognised that a sheltered food and beverage outlet is required for full visitor enjoyment of the site. There are very few existing spaces on site which offer any realistic opportunities for such

an amenity without resulting in unacceptable impact on significant fabric. The Canteen and Stores building is one of the few locations in the Inner Fort Precinct suitable for such use, with the advantage of easy access and the proximity of amenities.

The Recreation room may be used as a tea room or coffee shop. The former Canteen may be used as a kitchen to supply the Recreation Room using the existing servery. Catering services may be provided as an adjunct to the concessional arrangements for the MPC. Full opportunity of the courtyard and verandahs could be made to provide outdoor seating for a coffee shop.

The Gunners' and NCOs' rooms at the eastern end may continue to be used as offices, or office for a future curator, for concession use or interpretation.

### **Kitchen Block – Building 22 ( Code 1250 )**

The smaller rooms of this building are more suited to support activities of the museum, as workshops, stores, library, archives or office space.

### **Water storage system Cisterns**

The large cistern under the barracks courtyard is partially beneath the Ablutions block, and was infilled with sand during the current works program, as it was structurally unstable.

Remaining cisterns adjacent to the Commandants Cottage and in the parade ground are potentially viable and should be investigated for storage of rainwater for use on site. However it is noted that such storage and reuse would only be viable if associated contamination risks can be excluded in accordance with the Environmental Management Plan.

The recently reinstated downpipes in the cast iron columns of the Barracks Buildings and Commandants Cottage should be reconnected to the cisterns.

## **The Commandant's Cottage – Building 23 Code 1310**

All existing fixtures should be retained and conserved. A conjectural colour scheme has been introduced throughout the cottage during the current conservation program and joinery, walls and ceilings have been conserved.

The feasibility of use as a refreshments outlet has been investigated but is limited by poor access for disabled persons, steps at all entry points and remoteness of accessible amenities. Nevertheless, because of its unique location and panoramic outlook and past precedent for use as an entertaining and recreation facility, the building has potential for use for special functions, displays or exhibitions, if managed appropriately. Any proposal for public access or special functions should be cognisant of, and reflect the elevated status of the building which was the exclusive enclave of the Commanding officer and officer ranks.

The preferred option is for the Commandant's Cottage to interpret itself, as a period residence and military furnished Commandant's Quarters and later as the Officers' Mess. Small perimeter areas may be planted as cottage gardens, provided they are maintained on a regular basis.

**The western wing      Code 1311-1314**

These larger rooms (the former Living Room and Dining Room) may be suitable as low impact display areas or gallery spaces. The two bedrooms may be fitted out with interpretative devices explaining their original functions. The rooms may be furnished in a utilitarian manner, provided the items selected are not visually intrusive and do not detract from the significance of the spaces. Any new elements introduced in these rooms should be freestanding with minimal intervention on significant fabric.

Additional fabric may be introduced to protect significant fabric (e.g. floor and window coverings) which must be appropriate to the significance and character of the place.

**The eastern (service) wing      Code 1317-1315**

The servant's bedroom and the pantry may be used for support facilities, preparation or storage. This room may also be suitable for use as a library, office or similar activity.

The kitchen may be used as a limited food preparation area, in the event that the functions using western pavilion require catering

The laundry may also provide support facilities in the preparation of food or interpretation as a period washhouse. Such activity should not obscure surviving fittings such as the reconstructed copper and laundry tubs. Utility spaces such as the kitchen and wash house may be used for interpretation of the servant areas of the cottage

**Ablutions Block, Electrical Room, Comms      Code 1212**

Existing toilets have been refurbished to modern standards at the courtyard level, off the Barracks verandah. The amenities are accessible and compliant, therefore are suitable for visitors to the fort and to any future food and beverage outlet located in the Canteen building or courtyard.

**Old Guard House – Building 18      Code 1211**

The building should be presented as an interpretive display of its original function as a security and entry point to the fort as the original guard house and the World War II communications centre of the Fort. The fireplace and evidence of other fixtures should be retained. No drainage is available therefore the area is not suitable for amenities.

**West, NCO's Ablutions Block – Building 19      Code 1220**

Reconstructed as a storage area with no internal fittings or partitions as part of the 2008 project, entirely within the profile of existing structures. Remnants of the former flue for the water heater in the former washhouse should be retained.

It is suitable for use as a store, support facilities for the fort operations, or small scale workshop. It is not suitable for amenities as drainage is not available from this area.

**Laboratory – Building 16      Code 1131, 1132**

This room should be used exclusively for interpretation and provision of first hand visitor experience of a Fortress "Laboratory" and demonstration shell packing. The existing bench, timber doors, other fittings, and signwriting should be retained. All existing fabric

should be conserved and protected, and it should be used exclusively for interpretive activities, demonstrating its former function.

### **Gunners' Ablutions – Building 15 Code 1121, 1122**

The highly significant interior fixtures and fittings should be retained and conserved, and not adaptively reused or upgraded. These include the slate dividing partitions, overhead cisterns, WC pans with leather seats and remnant joinery. The restored interior should be visible for interpretive purposes only and closed off from public access.

### **Generator Room – Building 14 Code 1110**

Conserve for interpretive purposes, or may be suitable for adaptive reuse for compatible support function, such as workshop or store.

### **Inner Fortress Wall**

Some cosmetic repairs should be carried out to reduce visual impact on the wall surfaces. This may include repairs to major cracks in render and remove or conceal visible conduits.

### **New Guardhouse – Building 17 Code 1140**

Comprising one large space with the two former cells providing additional storage, structure may be used for utilitarian purposes, including visitor entrance, orientation, introduction to Fort Scratchley Historic Site, ticket and publication sales.

The building is also suitable as a shop for books, souvenirs or snacks as it is near the main entry gates and central to the building complex of the fort.

### **East Searchlight Directing Station**

The site has been made safe for visitation through extensive structural upgrading in 2008. The emplacement should be interpreted for its former important function during World War II and the roof level may be utilized as a viewing platform.

Demonstration searchlights and former interior fittings should be set up in conjunction with demonstrations of the fort battery operations involving the Command post (BOP) and the firing of the Mk VII guns.

### **Entry Gates Code 4261**

The 1981 replica gates were restored to their original configuration during the recent redevelopment program, and included reinstatement of the replica copper lanterns. Power was reconnected and a replica sentry box was reinstated.

### **Bridge Code 4262**

The bridge is has been reconstructed in the past and the timber bearers and deck are structurally sound. It continues to be suitable as the main entry and access for supply vehicles and pedestrian access over the dry ditch. The replica cast iron bollards from 1981 remain in place. During normal opening periods, the bridge will only be accessible to pedestrians

### **The Dry Ditch Code 4231**

As for the inner fort walls, cracking in the external walls should be monitored. Old services should be removed and visible conduits concealed.

Flagstones in the location of former open drains should be maintained.

## **OUTER FORT PRECINCT**

### **Driveway**

To be retained and maintained as the vehicular entrance to the Fort.

### **Parking Area**

The existing parking areas should be retained within the existing confines to minimise impact on significant elements and views to the site from the entrance driveway. Refer Policy 9.3 which specifies constraints on the use of this area.

No new parking areas should be developed on the Fort Scratchley Historic Site without all other avenues being first investigated.

### **Submarine Mines Command and Observation Post**

This partially underground structure should be only available for interpretation with all fabric conserved and protected. The space should be secured with wrought iron security grille and made accessible strictly for controlled visitation.

A former colour scheme should be introduced in this space, while retaining evidence of previous colour schemes.

Wartime cartoons and engravings to the east whitewashed wall should be protected and conserved.

Repair and conserve slate steps, retain and protect worn slate. Reinststate pipe handrail as per original detail.

Visitation to this structure should be strictly controlled due to the fragile nature of the fabric.

### **The Master Gunner's Cottage**

The Cottage may be used as a display space, meeting rooms or offices. The outdoor area within the fenced yard may be planted as a cottage garden, provided it is maintained on a regular basis.

This building will be suitable headquarters for volunteers working at the site.

### **The Former Transport Garage, New Workshop building**

This building was reconstructed to the same height and proportions as the former Transport garage as a new workshop facility in new materials. All maintenance on the site could be undertaken here for moveable items, new installations and artefact conservation.



Site maintenance equipment could be stored in this building. A portion of the space could be allocated for large group induction to the significance of the site, prior to tours, and educational excursions to the site.

## Multi Purpose Centre

A new facility for functions, catering, café, and visitors' amenities – refer preceding policies section. (Policies 19.1- 19.5) The MPC should always be managed and operated to ensure its use has no detrimental impact on significant elements of the Fort Scratchley Historic Site. Internal use should ensure that noise levels do not detract from the ambience and character of the site. Any activity within the MPC shall not be permitted to overflow to the Inner Fort precinct, unless such activity can be demonstrated prior to the activity to have no impact on the fabric of the fort or not to interfere with the interpretation, quiet enjoyment and appreciation by other visitors to the fort.

Functions utilising the MPC could include use of the inner fort precinct for low impact activities which promote and enhance the significance of this precinct in a positive manner. Such activities may include wedding photography, military ceremonies, utilising the parade ground and flagstaff in conjunction with catering and reception facilities provided by the MPC.

The MPC may also provide catering and food preparation to food outlets within the inner fort precinct, thereby reducing impact on vulnerable elements.

The control of parking, tourist coaches and crowds of pedestrians must be satisfactorily addressed by the site managers and function organisers to minimise any detrimental impact on the significance of the site. MPC parking must not overflow onto grassed areas.

## Open areas

**The western precinct, former SES complex, facing Nobbys Road** – refer preceding policies section. May be redeveloped under strict controls and in accordance with this HMP.

**The Recreational Open Space, facing the corner of Fort Drive and Parnell Place** – refer preceding policies section. To be retained and maintained as open recreation space.

## Fences

New fences and handrails should be carefully considered. Inappropriate and insensitively conceived fencing has the potential for severe impacts on the visual amenity of the site. Reconstructed fences to the outer areas including the picket fence to the Master Gunners Cottage, the post and rail fence to the west of the driveway, and the gates to the bottom of the driveway are based on photographic evidence of former structures. Any new fences to the outer precinct should be restrained in style and materials, restricting the design to simple post and rail, paling fences and picket fencing types in inconspicuous locations.

The chainwire perimeter fence to the Inner Fort Precinct is of simple design, but is 36 years old and in deteriorating condition. Any replacement fencing should have regard for visual impact and be located beneath sight lines and view lines from the upper areas of the battery and parade ground.

## Interpretation

**ICS Interpretive Strategy for Fort Scratchley, 2008 is summarised as follows:**

*The Fort Scratchley Historic Site (the Fort), a culturally significant fort complex, is an ex-military site situated in a landmark location on the coast of Newcastle. This historic precinct is comprised of an outstanding complex of buildings and structures, which demonstrate the evolution of military technology from the time of the Fort's inception in the 1880s, through to its decommissioning in the 1970s. Fort Scratchley is a captivating piece of Newcastle's cultural fabric, a place whose stories are just as layered as the structure itself. As a component of the Coal River Precinct story, Fort Scratchley provides the critical themes relating to its defence. The Fort has exceptional heritage significance against a number of criteria and is currently the subject of a program of conservation and interpretation works. As part of these works, a Heritage Interpretation Works Plan (the Plan) has been developed, with the aim of specifying the best location to present themes with consideration to audience, accessibility and the local environment.*

*As opening hours, paid tours and locked areas control access to specific sectors of the audience, a strategy was developed to provide a range of interpretive options based on four zones of presentation. These zones are: Public Realm, Semi-Public, Limited Access Zone (paid tour area) and Limited Access Zone (opening hours). The choice and presentation of interpretive themes in the above zones was tailored to the needs of each zone, that is the building and surrounds, specific historic events that may have occurred in each particular zone, and the anticipated audience for each zone. To achieve these strategic goals for interpretation, a series of reviews were conducted. These included:*

- 1. A theme analysis of the site. The aim of this review was to develop a range of themes that would most appropriately convey the story of Fort Scratchley.*
- 2. An investigation into audience profiles. A number of audience types were identified during a stakeholders 'Ideas Workshop', held in October 2007 and, from this data a refined list of proposed audience types was developed for inclusion in the Plan. Consideration was given to the needs of each audience group, in order to ascertain the most effective manner in which to disseminate the interpretive information.*
- 3. Environmental qualifiers were also examined, as these often dictate aspects of proposed interpretation, such as location, material type and size of devices.*

*Following these reviews, a Schedule of Elements<sup>56</sup> was developed using these four zones of interpretation, as a means of identifying the interpretive modes and devices for Fort Scratchley. This schedule itemised a suite of interpretive devices that addressed the entire range of interpretive themes for the site. In consultation with the Project Control Group, priority was given to a certain number of devices to be implemented on site prior to opening day, as due to time and budget constraints, it was not possible to commission all devices at once. This has meant that only a selection of themes and stories have been told to date. It is anticipated that the implementation of the remainder of devices will occur in future stages of the project.*

*The initial devices implemented for opening focussed on the Public Realm, in order to achieve the greatest presentation of themes, and orientation signage to assist visitors around the site. The remaining devices to be implemented focus on other zones in greater detail. They will present anecdotes from newspaper clippings, photographic images and illustrations, and link themes with other areas of the Coal River Precinct. Current tours of the tunnels will be enhanced through multimedia devices, such as projected images, sound systems, re-enactments and historic file footage. Visitors will leave this extraordinary site, not only with an understanding of past events here, but also with an insight to the core beliefs and attitudes of colonial and early 19th Century people, in response to a changing world.*

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<sup>56</sup> A separate document aimed at identifying a series of devices to interpret the Fort Scratchley site.

## 10.4 IMPLEMENTATION STRATEGY

### Priorities for Implementation

The full potential of Fort Scratchley as a cultural tourism attraction, an educational resource, interpretive centre, repository and display facility for military heritage should be fully exploited.

Short-term priorities should include protection of the building fabric and ongoing maintenance, beyond the life expectancy of the current upgrading and development program.

Long-term priorities should progressively enable active use by the City Council, the community of Newcastle and future commercial lessees.

### Priorities for Implementation - Table

Recommended Action	Affected Element	Priority
Implement Interpretation Strategy	Multiple	Urgent
Implement Exhibition Strategy	Multiple	Urgent
<b>INNER FORT PRECINCT</b>		
Accelerated weathering of s/s handrails	Barbettes	Urgent
Protect site from weed infestation	Battery	High
Reconstruct disappearing gun mounting	Barbettes	High
Maintain whitewash	Tunnels/ casemates	Medium
Restore one shell hoist to working order	Tunnels	High
Monitor damp	Tunnels	Medium
Reconstruct commandant's stairway	Parade ground	Medium
Reconstruct internal fittings & comms	BOP	High
Interpret and protect DRF remains	Parade ground	High
Upgrade rigging to fully operational	Flagstaff	High
Provide catering from canteen	Canteen and Stores	High
Reinstate water cisterns	Driveway/ parade ground	Medium
Old Guardhouse, reconstruct fireplace	Guard House	High
Reinstate colour scheme	Guard House	High
<b>OUTER FORT PRECINCT</b>		
Remove Anchor and stones	Driveway	Urgent
Install demonstration searchlights	Searchlight Directing Stn	High
Monitor bridge structure	Dry ditch	Medium
Maintain sandstone drains	Dry ditch	Medium
Protect cartoons and engravings	Mines Command Post	High
Reinstate colour scheme	Mines Command Post	High

Urgent = seek to implement within 1 – 3 years; High = Seek to implement within 3- 5 years;  
 Medium = seek to implement within 5 – 10 years

## **Future planning and management**

Long term management or any future change of use should be subject to the terms and conditions of this Heritage Management Plan and approval from the NSW Heritage Office. Input would be sought from user groups as part of the decision-making process for any significant or substantial future planning decisions.

## **Client Consultation and Management**

Members of stakeholder organisations and other participating groups should have some means of contributing to the ongoing use and management of the place within the constraints of this Plan and client user requirements.

Relevant stakeholders should be able to contribute to decisions regarding the use and conservation management of the place through representation on the Management Committee or equivalent stakeholder reference group.

Future strategies for heritage management of the site should be carried out in accordance with the recommendations of this Plan.

## **10.5 PLANNING FOR MAINTENANCE**

### **Current and Future Priorities for Maintenance**

The current upgrading and refurbishment program due for completion in 2008 will achieve a high level of conservation of existing fabric to all areas of the site, and includes extensive protective measures to halt or reduce the onset of deterioration that has been characteristic of past upgrading works. Nevertheless, success in maintaining the present high standard and condition of fabric and structures will be dependent on regular monitoring and preventative maintenance to avoid future costly remediation programs.

**Refer Appendix 1 for detailed maintenance schedules and monitoring requirements.**

The following general measures should be implemented as regular procedure:

#### **Urgent work: 0 – 1 year**

Monitor ingress of moisture and evidence of recurring spalling concrete to soffits and walls, seal any new moisture penetration and ensure effectiveness of drainage.  
Maintain finishes to external timber windows and doors, reputty glazing

#### **Medium term work 1 – 3 years**

Remove build-up of sand and soil around pits drains  
Derust and repaint iron fittings and other metalwork, ammunition hoists etc  
Renew internal whitewashing to plasterwork as required  
Maintain pathways and paving  
External repainting, monitoring of finishes in exposed areas

## **Preventative Maintenance**

Given the severe marine environment (salt, wind and erosion) regular routine maintenance is essential (washing-down, refixing, painting) rather than repair following failure. This will require a “cyclical” approach to ongoing maintenance tasks.

At times breakages occurring unexpectedly (windows, plumbing, and storm damage) will require a prompt response in order to limit the extent of damage that might result. This “unprogrammed” maintenance is a form of preventative maintenance, that is a quick and thorough response and reduces the risk of further damage.

All staff and visitors should be encouraged to report any breakages, failures or inconsistencies with respect to the site, buildings or building services.

Refer to the Contractor’s Operation and Maintenance Manuals for required maintenance, methods of repairs, colours, copies of manufacturers’ recommendations for care and maintenance.

## **Methodology - Refer Outline Checklist for Critical Maintenance, Appendix 1**

The checklist begins with site issues, then building elements generally, specific building fabric, issues relating to particular buildings or site elements, building services, equipment, fire services and safety.

Inspection and testing is important to the protection of the heritage asset. Responsibility for maintenance issues should not be misinterpreted as demarcation. All parties, staff and contractors have a responsibility to report and act on maintenance items or to ensure others who will act have been informed.

## **10.6 CONCLUSIONS**

Fort Scratchley has been assessed by this study as a site with an outstanding level of cultural significance and it is recommended that the Newcastle City Council give consideration to nominating for inclusion on the National Heritage List. This Heritage Management Plan outlines policies and guidelines for the care and management of the site to assist Newcastle City Council as the new custodians following transfer of the site from the Commonwealth Government.

Future and long-term use of the complex should be conditional on adoption of the policies outlined in this Plan. All actions relating to access, occupation, and use of the site should retain and enhance the heritage significance of the place.

Future management strategies, acquisition of exhibits, interpretation, displays, conservation and maintenance works should be in accordance with this Heritage Management Plan and the related studies outlined in Section 1.8.

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Fulford, RK, *We Stood and Waited – Sydney's Anti-ship Defences, 1939 – 1945* 1994

## APPENDIX 1

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### **Outline Checklist for Critical Maintenance**

## Outline Checklist for Critical Maintenance

The following checklist forms the basis for a Maintenance Programme to be developed by the Site Manager.  
 The interpretation installation outlined by the Heritage Interpretation Works Plan and Interpretation Strategy would impact on this schedule.

Location	Item/Element	Maintenance Action	Frequency	Responsibility	Significance	Notes
perimeter	Fences, gates	Check all rail fixings, gate hinges, paint finishes	3M	SM	L	Site security, unauthorised vehicle entry. Character and Interpretation
site	Available water pressure at the street	Check/test / Report	1Y	SM	H	Protect heritage asset, fire fighting capacity.
Site	Lighting	Check , replace failed lamps	As required , maximum 1M	SM	H	Safety. Protect heritage asset.
Site	Lighting	Check the base of all timber lighting poles , weed , treat for termites.	Weed with each mow. Treat 1Y.	SM	L	Site safety.
Entire site	Locking : all padlocks, doors locking barrels, Gate hinges, door hinges.	Lubricate with penetrating system. Check smooth operation of gate or door. Ease and adjust if faulty.	3M	SM	H	Prevent damage do to gates, doors etc being forced .
All buildings	Glass, window sashes	Inspect for breakages , putty and beading. Check operation and locking of all sashes, all sash chords, all hinges if applicable, all latches. Repair.	As required and minimum 1M	SM	H	Protect Heritage asset.
Site	Driveway and	Reflectors and road markings:	1M	SM	L	Safety.



Location	Item/Element	Maintenance Action	Frequency	Responsibility	Significance	Notes
	carparks	inspect, repair or renew if damaged.				
The site, the perimeter, in dry ditch, outside dry ditch wall along west elevation.	Weeds, bitou, grasses,turf. Perimeter shrubs.	Mowing and weeding, pruning.	Seasonal. 2W	SM	H	Maintain sight lines to built elements of the fort from the driveway , from the dry ditch bridge from city foreshore.
The site	Handrails	Test for rigidity	6M	SM	L	Safety
The site, roadways, junction pits, sumps, under MPC, in Tunnels. Above rampart walls.	All stormwater pits	Inspect, remove ALL rubbish and debris, remove ALL silt build-up, securely reinstall all pit covers ensure no trip hazards.	3M	SM	L	Avoids flooding.
All roofs .	Flashings, rainwater heads, gutters, membranes.	Inspect and sweep clear all debris, clear all RWH , check condition of all membranes and upturns behind parapets, check all chimney flashings.	1Y	SM	H	Protects heritage asset.
All painted elements	All painted elements	Inspect for blistering , peeling, deterioration, prepare and repaint as necessary.	5Y	SM	H	Protects heritage asset. Aesthetic and character considerations.
Gunners Toilets, ventilation louvres, chimneys including MPC.	Bird netting, bird wire mesh.	Inspect for breakage or corrosion, repair or replace	1Y	SM	L	Prevent birds entering , nesting, Damaging heritage asset.

Location	Item/Element	Maintenance Action	Frequency	Responsibility	Significance	Notes
All installations	Smoke and or thermal detection. Fire hose reels, portable fire extinguishers, warning systems, emergency lighting. PA.	Check in compliance with the relevant code or regulation and assemble test results in a single report, rectify any faults. Ensure all tags are current.	As per code or regulation requirement but no longer than 6M.	SM	H	Public safety and to protect the heritage asset.
All installations	Security system.	Check all zones , all sensors all repeater stations for full operation.	1M	SM	H	Protect heritage asset.
All timber structures, doors, windows, under floors, in roof spaces, tunnels.	All timber structures, under floors, in roof spaces, tunnels. All timber doors ,frames and windows.	Inspect and report for all vermin or termite activity , remove and treat as required .	3M visual. 6M report.	SM	H	Protect heritage asset.
All site	signs	Inspect and account for all directional, safety , way finding and interpretive signs across the site. Ensure all still located, all legible . Repair if damaged or missing.	3M	SM	H	Safety, interpretation of significance by the visitor.
All site	Vandalism, graffiti	Inspect all walls , buildings, roofs, fences, gates, etc for vandalism and graffiti. Remove graffiti within 24 hours of its application.	Daily.	SM	H	Repair to arrest further damage, eg rain penetration Remove incentive to apply graffiti.
All buildings, BOP, MFS, tunnels, fortress structures.	Metal embedments, lintels, metal fixings and masonry walls.	Inspect for corrosion of embedded elements, spalling of wall surfaces, Record location and extent and monitor over one month cycles/ periods to confirm stable or failing.	3M	SM	H	Protect heritage asset.

Location	Item/Element	Maintenance Action	Frequency	Responsibility	Significance	Notes
		Report and plan repairs in accordance with Contractor's Operation and Maintenance Manuals.				
Tunnels, Mines Firing Station, Casemate, Gun emplacements below ground.	Roofs and walls.	Inspect and monitor any apparent cracks and or leaks, record location and inspect monthly to confirm stability or deterioration. Monitor drainage in tunnels. Report and organise repair using methods outlined in the Contractor's Operation and Maintenance Manuals.	Inspections 1M; Report 6M.	SM	H	Protect heritage asset, protect installations/ displays.
Tunnels, Mines Firing Station, Casemate, Gun emplacements below ground.	ONLY WHERE CURRENTLY LIMEWASHED internal walls and soffits limewashed.	Inspect for adhesion of all limewashing, powdering, wear and tear, locate, record and monitor condition ,. Renew limewashing (original formula) .	Inspections 3M; Renewal every 3Y.	SM	H	Protect heritage asset, maintain aesthetics, maintain reflected light levels. Protect all tunnel signs , stencils.
All site	Metalwork items	Inspect , report , monitor the condition of metalwork items across the site and prepare batch preparation, stabilisation and recoating works as required to arrest corrosion.	Inspect 1Y; repair failing surface protection promptly.	SM	H	Protect heritage asset.
All site	Joinery items	Inspect, report , monitor the condition of joinery items across the site, including internal fitments and external window and door joinery. Ensure protection and conserve elements as required	Inspect 1Y	SM	H	Protect heritage asset.

<b>Location</b>	<b>Item/Element</b>	<b>Maintenance Action</b>	<b>Frequency</b>	<b>Responsibility</b>	<b>Significance</b>	<b>Notes</b>
All site	All elements, especially where subjected to wear and tear	Visitor numbers, visitor profiles and management impact should be formally monitored and the results used to modify management practice.				

## APPENDIX 2

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### **Numbering of Buildings and Spaces for Interpretation Schedule**

<b>Numbering of Buildings and Spaces :Translation between Interpretation Numbers and Contractors' Code Numbering</b>		
<b>Interpretation Numbering for Signs and Brochures</b>	<b>Name of Building or Space</b>	<b>Contractors' Numbering Code and HMP references</b>
1	Master Gunner's Cottage	4110
2	New Guardhouse	1140
3	The Laboratory	1131-1132
4	Searchlight Generator Room	1110
5	Old Guardhouse	1211
6	Canteen	1240
7	Barracks	1230
8	N.C.O.s Quarters	1261-1262
9	Commandant's Cottage	1310
10	Servant's Quarters	1317
11	Western Barbette	3256
12	Battery Observation Post	3201
13	No 1 Gun	3220
14	No 2 Gun	3230
15	Artillery Store	2110
16	Tunnel Entrance	2130
17	Mine Firing Station	4312
18	Searchlight Directing Station	3170
19	Gun Emplacement 1	2211
20	Gun Emplacement 2	2221
21	Gun Emplacement 3	2331
22	Casemate	2430-2420
23	Magazine	2310
24	Lamp Room	-
25	Small Arms Store	2120
26	Shell Store	2110
-	The Hall –Multi Purpose Centre	4250
-	Workshop	4220

## APPENDIX 3

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### **Recommended uses for Individual Spaces**

## Recommended uses for Individual Spaces

The following table utilises three basic criteria to identify the recommended access or uses suitable and compatible with each space. These are currently with all stakeholders for agreement. Refer to the drawings annexure for the location and CODE for each space.

Location	Public access/ display or interpretation use	Staff only/ administrative use	Storage or building services use.	notes
Playground	public	No	No	-
Sentry boxes	Public, photos, interpretation	Yes	No	Events
Master Gunners Cottage4110				
- front room 1	No	Yes	No	Meeting room
-front room 2	Yes	Yes	No	Furnished to MGC.
-bathroom	No	Yes	No	Volunteers' amenities
-Room3-4	No	Yes	Yes	Volunteer offices
-kitchen	No	Yes	Yes	Volunteer amenities
Workshop Building 4220	Yes	Yes	Yes	Volunteers' amenities' Restoration, maintenance
Multipurpose centre 4250				
-amenities	Yes	No	No	Public
-lobby	Yes			
-kitchen	No	Yes		
-Hall	Yes			
Mines Firing Station	Yes, supervised	No	No	Requires interpretation.
Search Light Generator 1110	No	No	Yes	To be confirmed
Search light mount	Yes	No	No	Self guided



<b>Location</b>	<b>Public access/ display or interpretation use</b>	<b>Staff only/ administrative use</b>	<b>Storage or building services use.</b>	<b>notes</b>
east				
Gunners' Toilets 1121&1122	Yes	No	No	Self guided
Laboratory 1131-1132	Yes	No	No	Self guided, tours
Guardhouse (Armoury) 1140	Yes	Yes	stock	Retail, information, display interpretation.
-Cell 1	Yes	No	No	Gun racks
-Cell 2	No	Yes	Yes	To be confirmed
Original guardhouse 1211	Yes	No	No	Display ,interpretation
Comms room 1212	No	No	Yes	New installations
Store 1213	No	No	Yes	Existing shelving
Bathroom 1214	Yes , display only	No	No	No working plumbing.
Toilets 1215	Yes	No	No	New amenities
Store 1216	No	Yes	Yes	To be confirmed
NCCO's Ablutions 1220				
-room 1	No	Yes	Yes	To be confirmed
-room 2/3	Yes	No	No	To be confirmed
Barracks South 1232	Yes	No	No	Travelling exhibitions, To be confirmed.
Barracks North 1231	Yes	No	No	Permanent exhibition, barracks.

<b>Location</b>	<b>Public access/ display or interpretation use</b>	<b>Staff only/ administrative use</b>	<b>Storage or building services use.</b>	<b>notes</b>
Recreation Room 1243	Yes, food and beverages, interpretation	No	No	Accessible.
Canteen 1242	No	Yes	Yes	New handbasin and sink.
NCO room 1 1241	No	Yes, NCC	No	Site admin office use likely. To be confirmed.
NCO Room2 1244	No	Yes, NCC	Yes	To be confirmed.
Office 1 1268	No	Yes, Volunteers	Yes	To be confirmed
Store 1267	No	Yes	Yes	To be confirmed
Kitchen 1266	Yes, walk through. Interpretation display.	No	No	To be confirmed. Moisture issues.
Wash Room 1265	Yes, walk through.	No	No	To be confirmed
Store 1264	No	Yes	Yes	
Barracks Office 1263	No	Yes	No	
NCO Room 4 1262	Yes	No	No	
NCO Room 3 1261	Yes	No	No	
Toilets WC1 & 2 1321	Yes	No	No	Public and staff amenities
Store 1320	No	Yes	Yes	
Bedrm / Office 1 1311	Yes	No	No	
Sitting room 1312	Yes	No	No	

<b>Location</b>	<b>Public access/ display or interpretation use</b>	<b>Staff only/ administrative use</b>	<b>Storage or building services use.</b>	<b>notes</b>
Bedroom 2 1313	Yes	Yes	No	
Bedroom 3 1314	Yes	No	No	
Wash House 1315	Yes	No	No	
Kitchen 1316	Yes, walk through	No	Yes	
Servants Room 1317	No	Yes	Volunteer library	To be confirmed.
Servants room 1318	No	Yes	Yes	Volunteers amenities
Pay room 1319	Yes	No	No	
Coal Bunker 1270	No	No	No	
Stair 3	Yes, walk through	No	No	
Battery Observation Post 3210				
-Room 1	Yes	No	No	
-Rooms 2,3,4.	Yes	No	No	
-Rooms 5 and 6	No	No	Yes	
-room 7	Yes	No	No	
-Roof	No	No	No	
Tunnel Entrance 2130	Yes, guided	No	No	
Artillery Store 2110	Yes, information and retail.	Yes	Yes, retail	
Small Arms store 2120	No	No	Yes	
Passages	Yes	No	No	

<b>Location</b>	<b>Public access/ display or interpretation use</b>	<b>Staff only/ administrative use</b>	<b>Storage or building services use.</b>	<b>notes</b>
2130,2170,etc				
GE: 1 2211	Yes	No	No	
GE:2 2221	Yes, gun , grate over	No	No	
GE:3 2231	Yes	No	No	
Shell Store bottom Stair 9	Yes	No	No	
Magazine 2310 East	Yes	No	No	
Magazine 2310 West	No	Yes	Yes	New internal wall subject to HMP
Shell lifter behind Casemate Battery 1	Yes	No	No	Demonstrates Unrestored.
Casemate Battery 1 2410	Yes	No	No	Lamps
Casemate Battery 2 2420	Yes	No	No	
Casemate Battery 2 Shell Store	No	No	Yes	
Casemate Battery 3 2430	Yes	No	No	
Casemate Battery 3 Expense Magazine	No	No	Yes	
Stair 10 3160	Yes	No	Yes, cupboards off Stair 10	
Western Barbette 3250	Walkthrough only	No	No	
Parade Ground 3110	Yes	No	No	
Signal Hill 3330	Yes	No	No	Public and ceremonial

<b>Location</b>	<b>Public access/ display or interpretation use</b>	<b>Staff only/ administrative use</b>	<b>Storage or building services use.</b>	<b>notes</b>
Gun 1 3220	Yes, limited, guided	No	No	Viewed from path
Covered link between Guns 1&2	Yes, limited, guided	No	No	
Gun 2 3230	Yes, limited, guided	No	No	
Dry Ditch 4310	Yes, from S-W	No	No	
Refer to strategy Interpretation				

## APPENDIX 3

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### **Layout Drawings of the Fort Scratchley Site** Suters 2007 - 2008

**A 103**

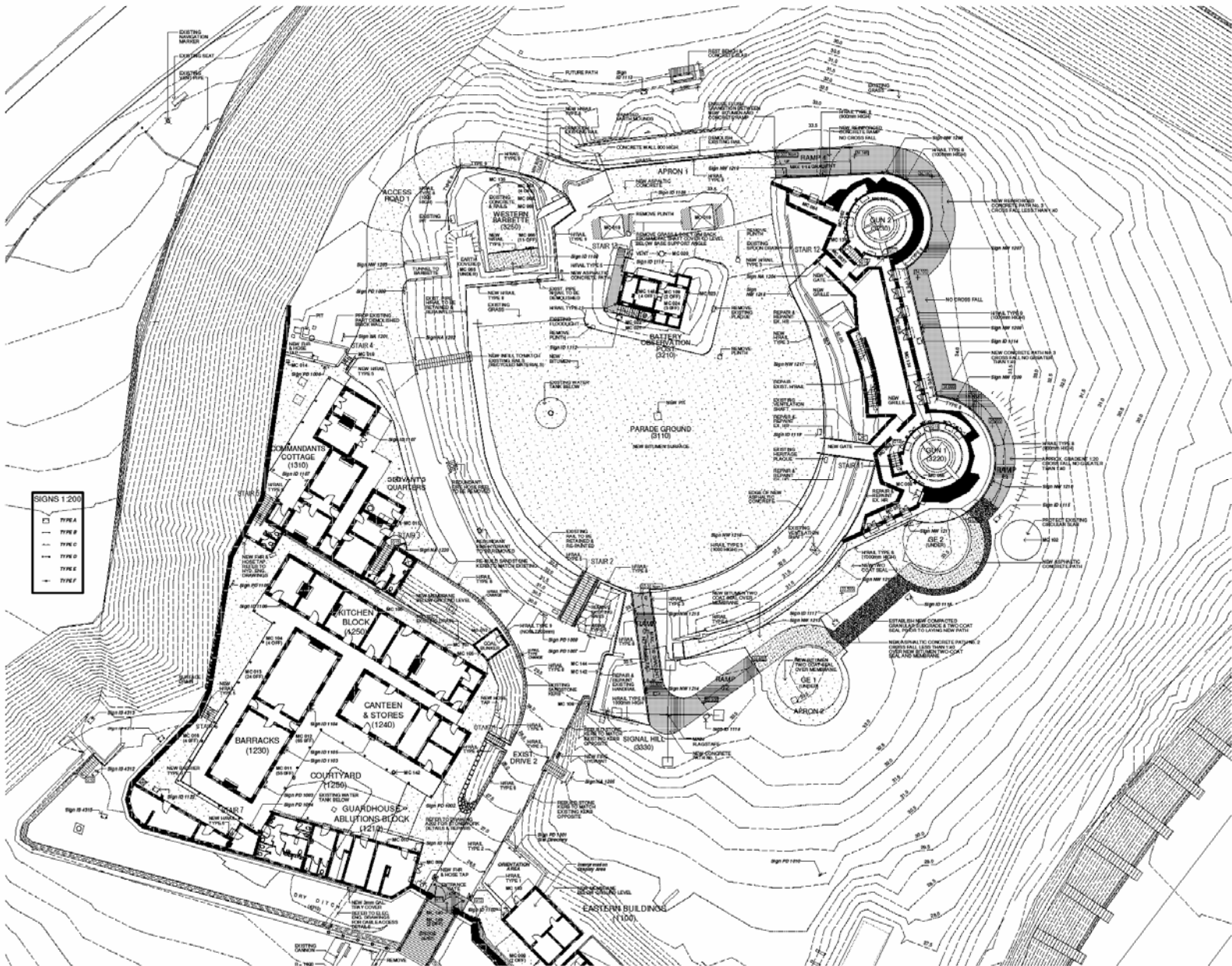
**A 202**

**A 201**

**A 105**

**A 401**

**A 402**



SIGNS 1:200	
[Symbol]	FFFA
[Symbol]	FFFB
[Symbol]	FFFC
[Symbol]	FFFD

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**Heritage Conservation:**  
All works on the site are to be done in accordance with the Fort Scratchley Heritage Study. All works shall be done in accordance with the Heritage Study. All works shall be done in accordance with the Heritage Study.

- Legend**
- [Symbol] CONCRETE
  - [Symbol] EXISTING WALLS
  - [Symbol] CONCRETE WALLS
  - [Symbol] EXISTING WALLS
  - [Symbol] NEW CONCRETE SUBGRADE & TWO-CURT SEAL
  - [Symbol] EARTH TO BE REMOVED
  - [Symbol] METALS CONSERVATION NUMBER
  - [Symbol] SIGN CODE
  - [Symbol] REFER TO OTHER WORKS
  - [Symbol] REFER TO OTHER WORKS
  - [Symbol] REFER TO OTHER WORKS
  - [Symbol] REFER TO OTHER WORKS
  - [Symbol] REFER TO OTHER WORKS
  - [Symbol] REFER TO OTHER WORKS
  - [Symbol] REFER TO OTHER WORKS

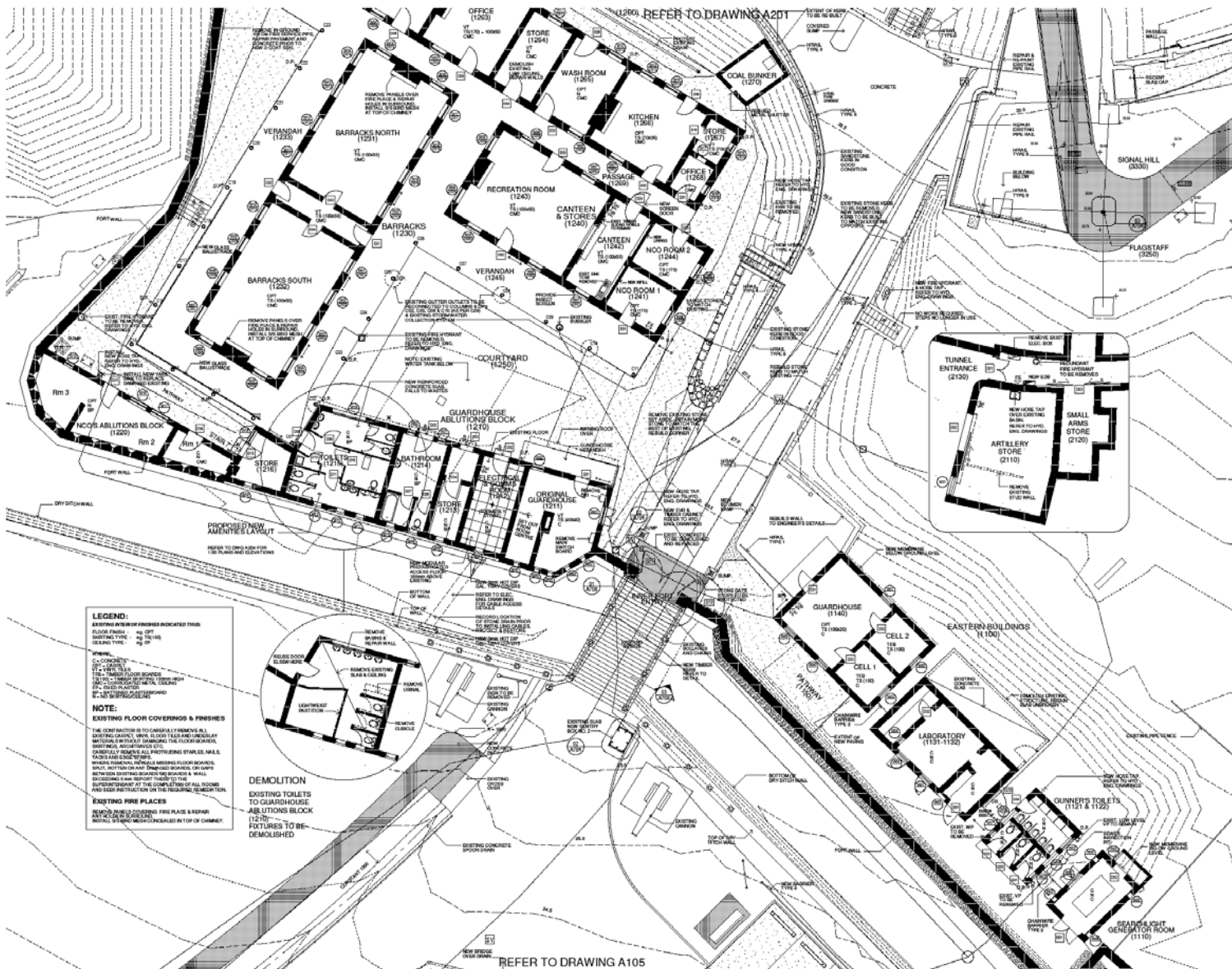
**FORT SCRATCHLEY  
HISTORIC SITE**  
Australian Government  
Department of Finance and Administration



Code	Description	Date	By
L	Issue for Approval	05/11/2010	MLP
K	Check for Approval	20/10/2010	MLP
J	To NSW Heritage	10/10/2010	MLP
I	To NSW Heritage	10/10/2010	MLP
H	To NSW Heritage	10/10/2010	MLP
G	To NSW Heritage	10/10/2010	MLP
F	To NSW Heritage	10/10/2010	MLP
E	To NSW Heritage	10/10/2010	MLP
D	To NSW Heritage	10/10/2010	MLP
C	To NSW Heritage	10/10/2010	MLP
B	To NSW Heritage	10/10/2010	MLP
A	To NSW Heritage	10/10/2010	MLP

**FORT SCRATCHLEY HISTORIC  
SITE RESTORATION WORKS**  
Location:  
CNR FORT DRIVE & NOBBYS RD  
NEWCASTLE EAST, NSW  
Client:  
DEPARTMENT OF FINANCE  
& ADMINISTRATION

**Drawn:**  
PART SITE PLAN - NORTH  
ABOVE GROUND  
Date: 18/05/10  
Scale: 1:200 @ A1  
Drawing Number: 7291  
Part Number: A103  
Sheet: L



**Notes:**  
 All dimensions contained in this document are integral and the tolerance is indicated for every part of a drawing.  
 Levels of dimensions shall be as indicated by the drawing and the contractor shall be responsible for the correct level.  
 Changes to the work shall be indicated by a drawing revision.  
 The Architect reserves the right to alter the drawings without notice.  
 The contractor shall be responsible for the correct level and the contractor shall be responsible for the correct level.  
 The contractor shall be responsible for the correct level and the contractor shall be responsible for the correct level.

**Structural Comments:**  
 All structural work shall be in accordance with the Australian Standard AS 3600:2001. The contractor shall be responsible for the correct level and the contractor shall be responsible for the correct level.

**Materials:**  
 Materials shall be as specified in the drawings and shall be of a quality and standard as specified in the drawings. The contractor shall be responsible for the correct level and the contractor shall be responsible for the correct level.

- Legend:**
- CONCRETE
  - EXISTING FLOOR COVERINGS AND FINISHES
  - NEW FLOOR COVERINGS AND FINISHES
  - DOOR NUMBER - REFER TO SCHEDULE
  - WINDOW NUMBER - REFER TO SCHEDULE
  - GATE NUMBER - REFER TO SCHEDULE
  - FLOOR LEVEL INDICATIVE ONLY
  - FIRE RISK
  - NEW WALLS
  - NEW ROOFING
  - NEW FLOOR
  - COLUMN NUMBER



**Client:** City of Newcastle

F	To Wharfedale	14/10/08	ref
G	To Newcastle City Council	14/10/08	ref
H	To Newcastle City Council	14/10/08	ref
I	To Newcastle City Council	14/10/08	ref
J	To Newcastle City Council	14/10/08	ref

**Project:** FORT SCRATCHLEY HISTORIC SITE RESTORATION WORKS

**Location:** CNR FORT DRIVE & NOBBYS RD  
 NEWCASTLE EAST, NSW  
 DEPARTMENT OF FINANCE & ADMINISTRATION

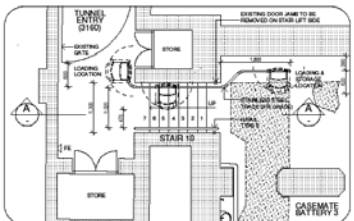
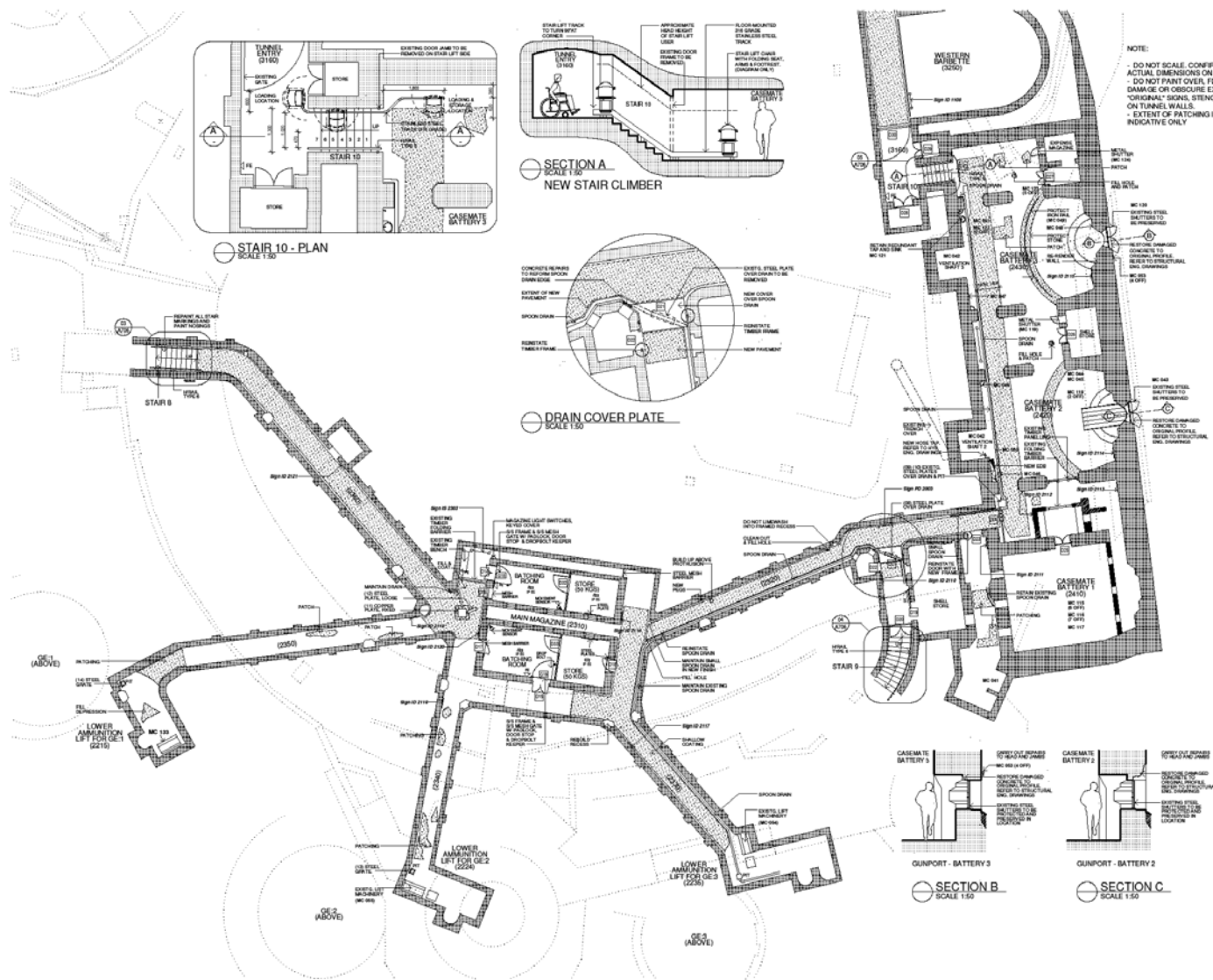
**Drawings:**

Gate/Courtyard Floor Plans Lower	Drawn
Scale	Date
1:100 @ A1	18/05/08
Drawn	AD
Checked	AD
1:7000/2007/2310/BA50/7301 MODEL PLAN	
Project Number	Quantity Number
7291	A202
Scale	Grid
	G

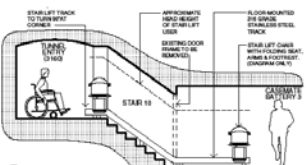
**suters**



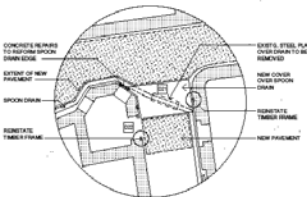




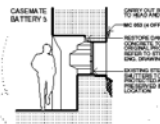
STAIR 10 - PLAN  
SCALE 1:50



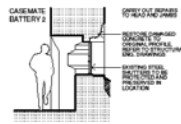
SECTION A  
NEW STAIR CLIMBER



DRAIN COVER PLATE  
SCALE 1:50



SECTION B  
SCALE 1:50



SECTION C  
SCALE 1:50

NOTE:  
- DO NOT SCALE. CONFIRM ALL ACTUAL DIMENSIONS ON SITE.  
- DO NOT PAINT OVER. FIX OVER DAMAGE OR OBSCURE EXISTING "ORIGINAL" SIGNS, STENCILS ETC ON TUNNEL WALLS.  
- EXTENT OF PATCHING IS INDICATIVE ONLY.

Heritage Consideration:  
All works on the site are to ensure that the Fort Scratchley Building and the site are protected, preserved and enhanced for future generations. The site is a State Heritage Site and is listed on the State Heritage Register. The site is also listed on the Commonwealth Heritage List. The site is also listed on the International World War II Military Heritage List. The site is also listed on the International World War II Military Heritage List. The site is also listed on the International World War II Military Heritage List.

- Legend:
- CONCRETE
- EXISTING WALLS
- ASPHALT
- GRAVEL
- WOOD CONSTRUCTION
- EXISTING FLOORING
- METAL CONSTRUCTION MATERIALS REFER TO SCHEDULE AND DATA SHEETS
- IRON NUMBER REFER TO SCHEDULE
- WINDOW NUMBER REFER TO SCHEDULE
- GLASS NUMBER REFER TO SCHEDULE
- SAFETY NUMBER REFER TO SCHEDULE
- FIRE EXTINGUISHER
- FIRE BLANKET

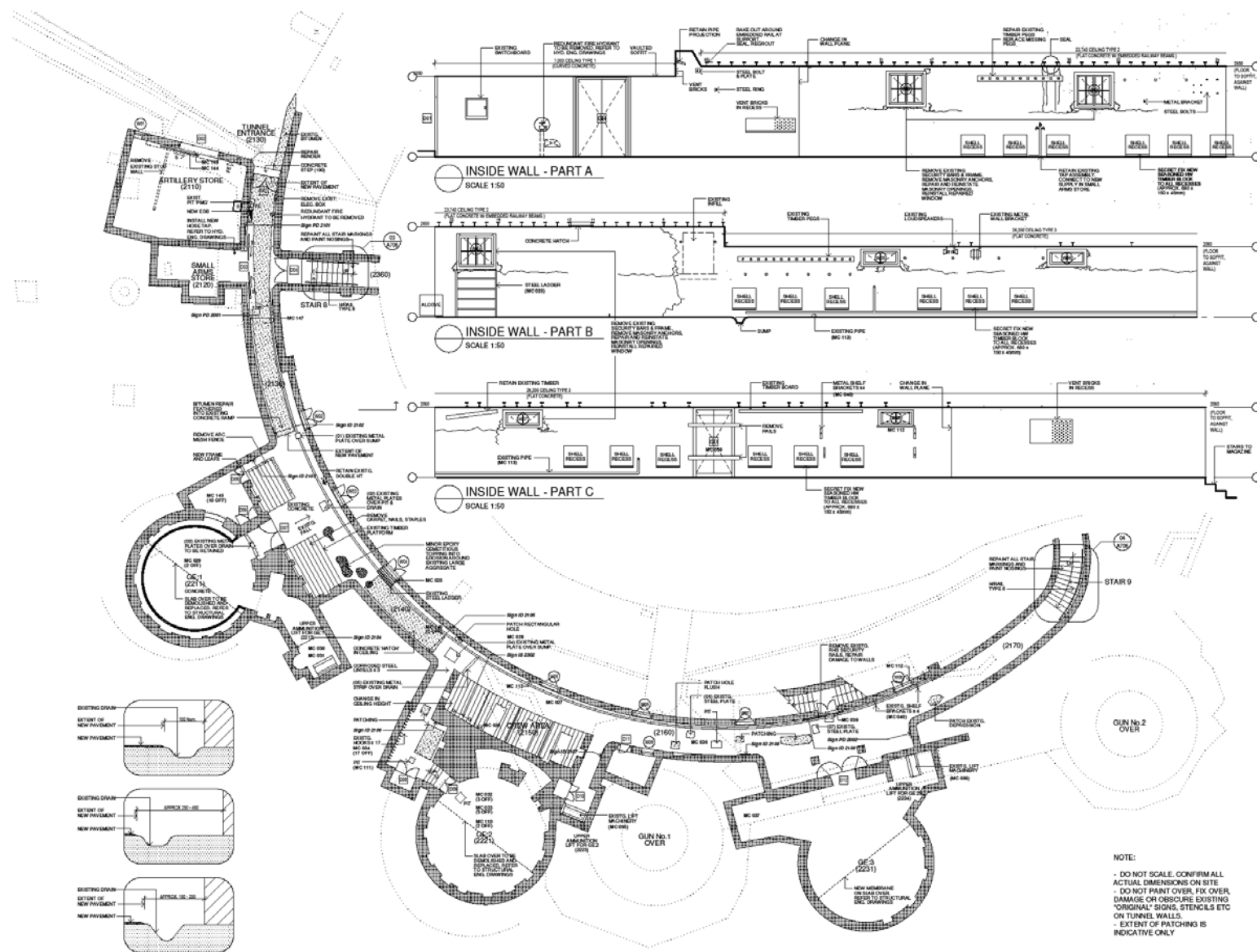


Symbol	Description	Level	Height
K	10m Reserve For Tanker	2010m	10m
H	Tankers at Sea	2010m	10m
D	Open Area For Reserve	2010m	10m
P	Paved Area For Reserve	2010m	10m
S	Scale Change From 1:50 to 1:100	2010m	10m
T	1:500 New Topography (1:500 - 1:100)	2010m	10m
C	1:500	2010m	10m
B	1:500	2010m	10m
A	1:500	2010m	10m
1	1:500	2010m	10m
2	1:500	2010m	10m
3	1:500	2010m	10m
4	1:500	2010m	10m
5	1:500	2010m	10m
6	1:500	2010m	10m
7	1:500	2010m	10m
8	1:500	2010m	10m
9	1:500	2010m	10m
10	1:500	2010m	10m

PROJECT: FORT SCRATCHLEY HISTORIC SITE RESTORATION WORKS  
LOCATION: CNR FORT DRIVE & NOBBYS RD, NEWCASTLE EAST, NSW  
DEPARTMENT OF FINANCE & ADMINISTRATION

DATE: 13/09/2018  
DRAWN: [Name]  
CHECKED: [Name]  
SCALE: 1:50 @ A1  
PROJECT NUMBER: 7291  
DRAWING NUMBER: A402  
REVISION: K

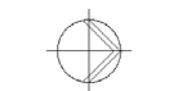




**Notes:**  
 The information contained in this document is prepared for the use of the client and is not to be used for any other purpose without the written consent of the client.  
 Design is to be in accordance with the Australian Standards, the Queensland Building and Construction Commission (QBCC) and the Queensland Building and Construction Commission (QBCC) and the Queensland Building and Construction Commission (QBCC).  
 Design is to be in accordance with the Australian Standards, the Queensland Building and Construction Commission (QBCC) and the Queensland Building and Construction Commission (QBCC).

**Usage Consideration:**  
 All workers on the site are to be aware that the Fort Scratchley Building and the site is a historical site and is a heritage site. All workers are to be aware that the site is a historical site and is a heritage site. All workers are to be aware that the site is a historical site and is a heritage site.

- Legend:**
- CONCRETE
  - EXISTING WALLS
  - ASPHALTE
  - GRASS
  - WOODEN DIMENSION
  - EXISTING TO BE
  - METAL CONSTRUCTION NUMBER
  - WOODEN NUMBER REFER TO SCHEDULE
  - GLASS NUMBER REFER TO SCHEDULE
  - STEEL NUMBER REFER TO SCHEDULE
  - IRON NUMBER



K	Site Number For Tender	2019/06	ref
L	To Whom it Concerns	2019/06	ref
M	Signs Issued for Review	2019/06	ref
N	Permitting & Public Works	2019/06	ref
O	Signs Issued for Tender	2019/06	ref
P	To Whom it Concerns	2019/06	ref
Q	To Whom it Concerns	2019/06	ref
R	To Whom it Concerns	2019/06	ref
S	To Whom it Concerns	2019/06	ref
T	To Whom it Concerns	2019/06	ref

**Project:** FORT SCRATCHLEY HISTORIC SITE RESTORATION WORKS  
**Client:** CNR FORT DRIVE & NOBBYS RD NEWCASTLE EAST, NSW  
**Department:** DEPARTMENT OF FINANCE & ADMINISTRATION

**NOTE:**  
 - DO NOT SCALE. CONFIRM ALL ACTUAL DIMENSIONS ON SITE.  
 - DO NOT PAINT OVER, FIX OVER, DAMAGE OR OBSCURE EXISTING 'ORIGINAL' SIGNS, STENCILS ETC ON TUNNEL WALLS.  
 - EXTENT OF PATCHING IS INDICATIVE ONLY.



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 Scale of dimensions and levels to the millimeter unless otherwise stated in the documentation of the work.  
 Changes are to be marked and recorded on all copies of drawings. The original drawings only. Do not make from a copy.  
 Dates between project numbers are the revision number and date for impact of changes from the drawing.  
 The identification of the type, make, model and application number of the material used for construction shall be indicated on the drawing and shall be approved by the Engineer.  
 The Engineer shall be advised of any such changes.
- Heritage Consideration:  
 All contents on this site are the subject of the Fort Scratchley Buildings and Site and listed in historical, state and local heritage registers, including state heritage registers and heritage value. This must be properly considered during construction.
- Works on or in the immediate vicinity in accordance with the specifications and layout shall be carried out with any change to adjacent built fabric. Appropriate advice should be sought where necessary.
- Legend:
- CONCRETE
  - EXISTING WALLS
  - ASPHALT  
CONCRETE  
SETBACK
  - NEW CONCRETE SUBGRADE AT 100mm TO BE FINISHED
  - EXISTING TO BE FINISHED
  - METALS CONSTRUCTION (MATERIALS TO BE SCHEDULED AND CATCH SHEETS)
  - HIGH GOOSE
  - NEW TANK
  - EXISTING TANKS WITH NEW LAYOUT
  - DATE NUMBER - REFER TO SCHEDULE
  - SPOT LEVEL INDICATIVE ONLY

**FORT SCRATCHLEY**  
 HISTORIC SITE

Australian Government  
 Department of Finance and Administration

The City of  
**Newcastle**

1:16th Revision For Tender	19/01/08	ref	ref
2: 17th Revision	19/01/08	ref	ref
3: New Parks, Island to Completion	19/01/08	ref	ref
4: Signage for the Buildings	19/01/08	ref	ref
5: Pavement & Paths Area	04/07/10	ref	ref
6: 1:10th New Clearing No. 10/08	19/01/08	ref	ref
7: 1:10th	19/01/08	ref	ref
8: 1:10th	19/01/08	ref	ref
9: 1:10th	19/01/08	ref	ref
10: Description	Site	Site	Site

Prepared by: **INTER ARCHITECTS PTY LTD**  
 12/12, The Esplanade, Newcastle, NSW 2300  
 www.interarchitects.com.au

Project: **FORT SCRATCHLEY HISTORIC SITE RESTORATION WORKS**

Client: **CAR FORT DRIVE & NOBBYS RD NEWCASTLE EAST, NSW**

Owner: **DEPARTMENT OF FINANCE & ADMINISTRATION**

Drawing: **PART SITE PLAN - SOUTH NEW BUILDINGS & DRIVEWAY**

Scale:	1:200 @ A1	Date:	18/09/08	Drawn:	AD
By:	AD	Check:		Issue:	
Project Number:	1170002735072910	Base:	7351_MODEL_PLN		
Sheet Number:	7291	Sheet Title:	A105	Scale:	H

**suters**

## APPENDIX 5

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### **Fort Scratchley : Design Drawings dated 1878 and later alterations to Barbettes**

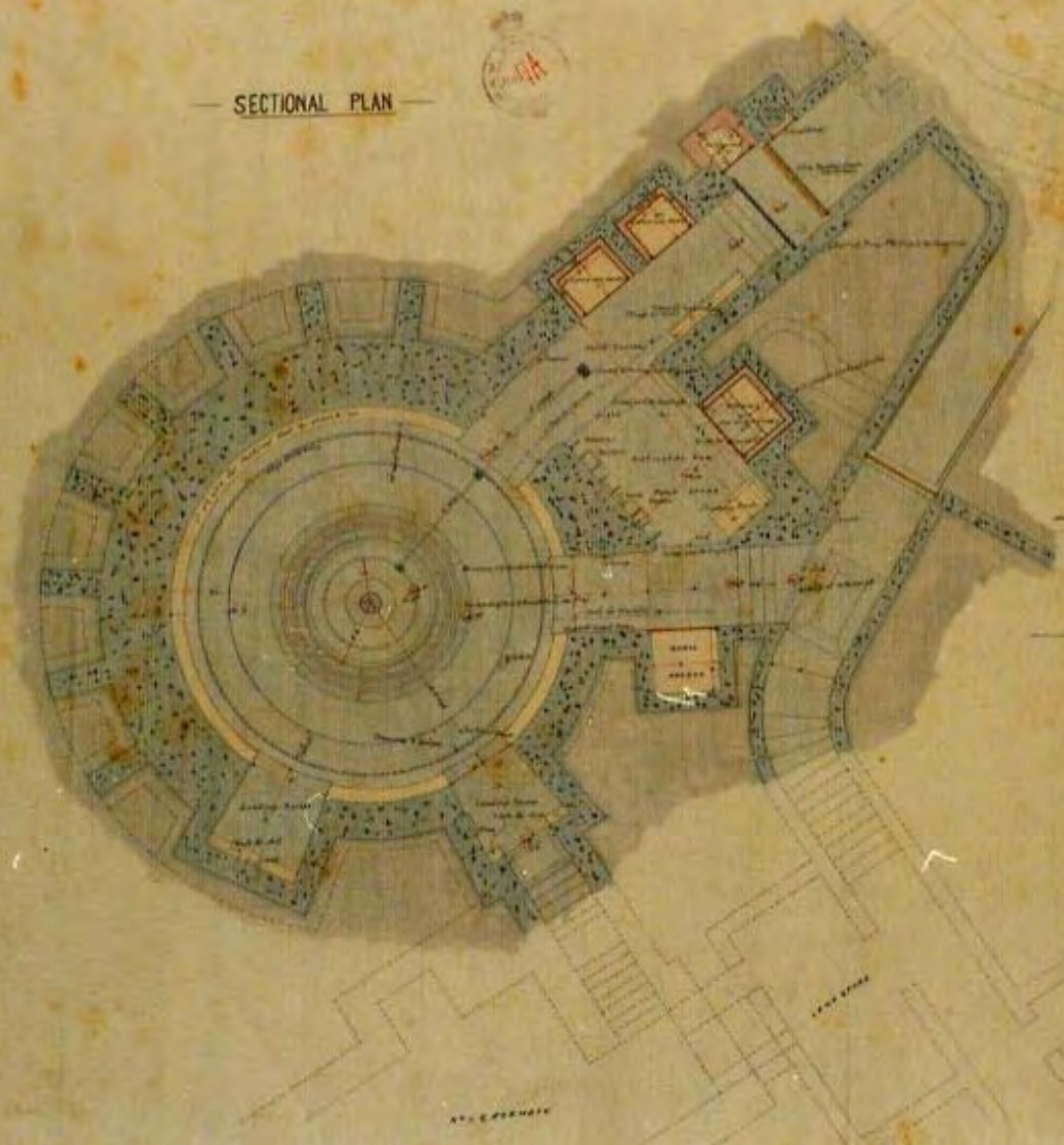
Source of originals courtesy Victoria Barracks Military Museum Archives  
(B Dawbin copies 1981)





DRAWING NO 2

SECTIONAL PLAN



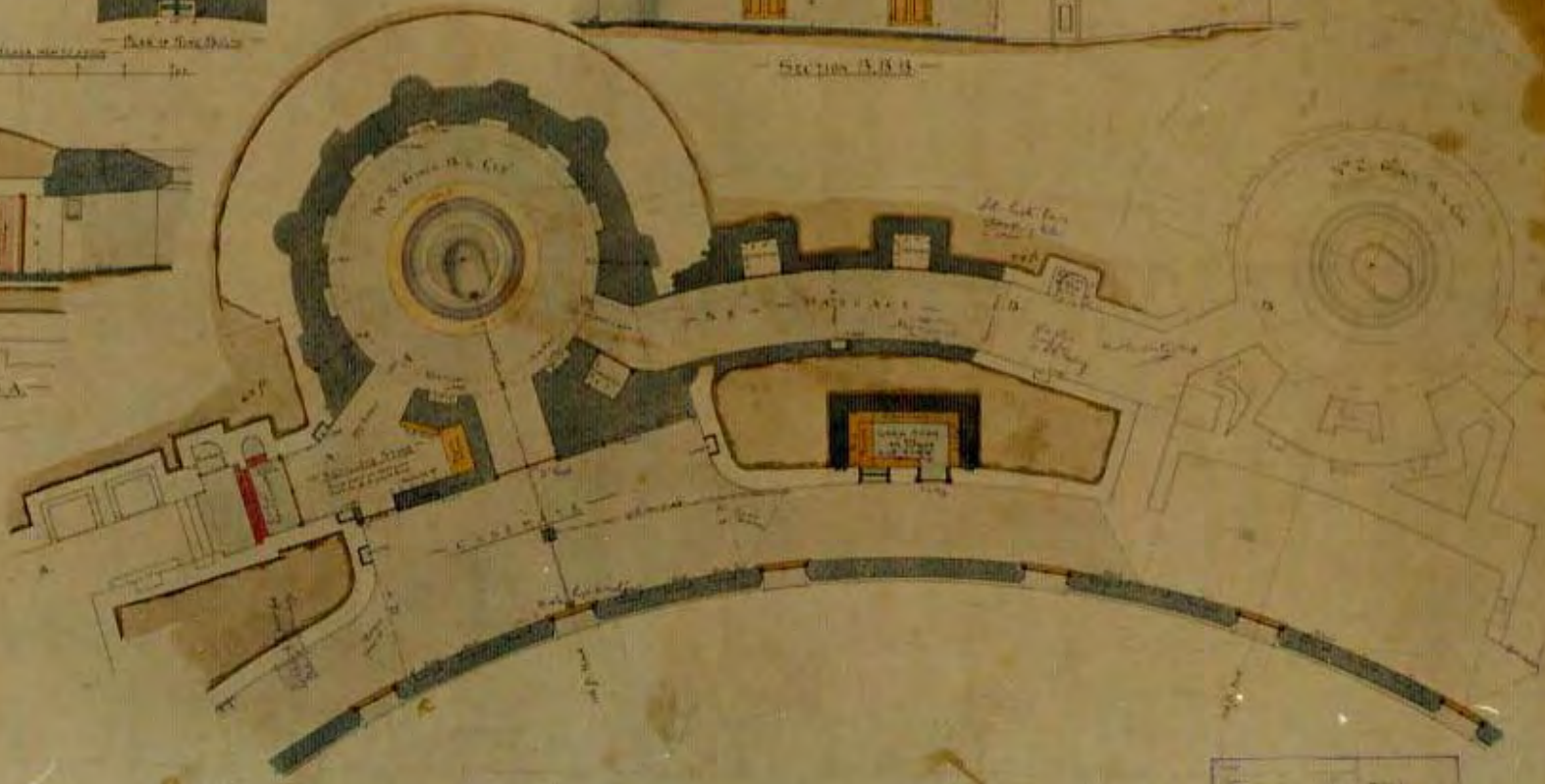
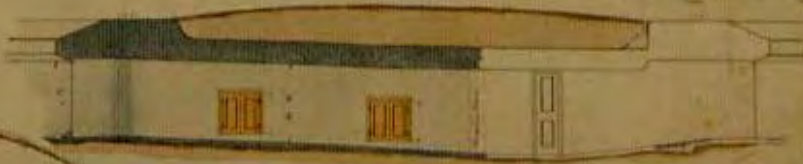
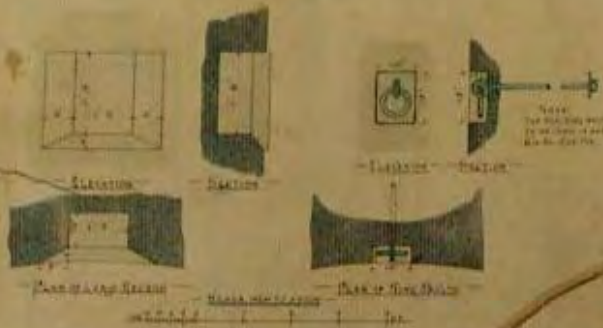
N & W DEFENCED  
 NEWCASTLE  
 FORT SCRATCHLEY  
 EMPLACEMENT FOR 8 INCH B LGUN  
 SCALE 4 FT = 1 INCH

*Large Drawing of Fort Scratchley  
 1855  
 Capt. J. P. ...  
 ...  
 ...*

ARCHITECTURE & ENGINEERING



— N. S. W. DEFENCES —  
 — FORT SCRATCHLEY, NEWCASTLE —  
 — DETAILS OF EMPLACEMENT FOR N° 5 GEN —  
 — ALTERATIONS TO MATCH WITH GEN PASSAGE —  
 — SCALE 1/10000 —







— COMMANDING OFFICER —



— FIRE COMMANDER —  
— LEFT —



— SECTION A —



FORT SCRATCHLEY  
NEWCASTLE

SCALE 1 INCH = 1 FOOT



— F.G. RIGHT —



