

# APPENDIX 2: HLA ENVIROSCIENCES REPORT

---

# Catherine Hill Bay Historical Archaeological and Industrial Heritage Report

13 January 2005

Prepared for:

**EJE Town Planning**

412 King Street

Newcastle,

NSW 2300

Report by:

**HLA-Envirosciences Pty Limited**

ABN: 34 060 204 702

Level 2, 55-65 Grandview Street

PO Box 726 Pymble NSW 2073 Australia

Ph: +61 2 9988 4422

Fax: +61 2 9988 4441

HLA Ref: S6017701\_DraftRpt01\_Jan05.doc



# DISTRIBUTION

Catherine Hill Bay Historical Archaeological and Industrial Heritage Report  
13 January 2005

Copies	Recipient	Copies	Recipient
1	Shea Hedley Heritage Planner EJE Town Planning 412 King Street Newcastle, NSW 2300		

This document was prepared for the sole use of EJE Town Planning and the regulatory agencies that are directly involved in this project, the only intended beneficiaries of our work. No other party should rely on the information contained herein without the prior written consent of HLA-Envirosciences Pty Limited and EJE Town Planning.

By

**HLA-Envirosciences Pty Limited**  
ABN: 34 060 204 702  
Level 2, 55-65 Grandview Street  
PO Box 726 Pymble NSW 2073 Australia

\_\_\_\_\_  
Dr Iain Stuart  
Principal Archaeology & Heritage Management

Peer Review:

Date:

Michael England Principal, National Practice Leader Environmental Planning	

# CONTENTS

<b>1</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	Project Description .....	1
1.2	Project Team .....	1
1.3	Study Area.....	1
1.4	Constraints and Limitations to this report.....	1
<b>2</b>	<b>SITE HISTORY .....</b>	<b>3</b>
2.1	New Wallsend Coal Mining Company (1874-1876) .....	3
2.2	THE WALLARAH COAL CO. LTD: 1888-1957 .....	4
2.3	1964: NEW COAL LOADING PLANT .....	7
2.4	Historic Themes.....	8
<b>3</b>	<b>PHYSICAL DESCRIPTION .....</b>	<b>11</b>
3.1	Remnants of Coastal Railway Line (CPP 1) .....	11
3.2	Mine Managers Residence (CPP 2).....	11
3.3	Jetty Masters House (CPP 3).....	11
3.4	300 tonne bunker (CPP 5).....	11
3.5	Washery (CPP 6).....	11
3.6	Bin Building (CPP 7).....	12
3.7	Original Workshop (CPP-9).....	12
3.8	Jetty (CPP-8) .....	12
3.9	Substation (CPP 10).....	13
3.10	Workshop and Bathhouse (CPP 11) .....	13
3.11	Office Building (CPP 12) .....	13
3.12	Summary of physical evidence.....	13
3.13	Site Condition and Integrity .....	13
3.14	Archaeological Potential.....	14
<b>4</b>	<b>SIGNIFICANCE ASSESSMENT .....</b>	<b>17</b>
4.1	Determining Heritage Significance .....	17
4.2	Overall Site Assessment .....	18
4.3	STATEMENT OF SIGNIFICANCE .....	20
4.4	Assessment of the current sites .....	22
	4.4.1 Review of Individual item assessment.....	22
<b>5</b>	<b>MANAGEMENT.....</b>	<b>24</b>
5.1	Statutory Controls Relating to Heritage.....	24
<b>6</b>	<b>REFERENCES .....</b>	<b>26</b>



## FIGURES

Figure 1      Site Location Plan  
Figure 2      Site Plan

## PLATES

# 1 INTRODUCTION

EJE Town Planning has prepared a Conservation Management Plan (CMP) for the mines at Wallarah and Moonie and the Catherine Hill Bay Coal Preparation plant. Following comments on a draft it was requested that a more specifically industrial heritage assessment with some assessment of historical archaeology be included in the CMP, specifically for the Catherine Hill Bay area. EJE Town Planning commissioned Dr Iain Stuart from HLA-Envirosciences Pty. Ltd (HLA) to undertake this assessment.

## 1.1 Project Description

The project description is an industrial heritage and historical archaeological assessment of sites within the Coal Preparation and Loading facilities at Catherine Hill Bay. The aim of the report is to supplement the CMP and thus it draws heavily in the material presented in the CMP.

## 1.2 Project Team

The HLA project team for this project was Dr Iain Stuart with quality assurance by Michael England.

## 1.3 Study Area

The study area is the Coal Preparation Plant at Catherine Hill Bay specifically the following items:

- Remnants of Coastal Railway Line (CPP 1);
- Mine Managers Residence (CPP 2);
- Jetty Masters House (CPP 3);
- 300 tonne bunker (CPP 5);
- Washery (CPP 6);
- Bin Building (CPP 7);
- Original Workshop (CPP-9);
- Jetty;
- Substation (CPP 10);
- Workshop and Bathhouse (CPP 11); and
- Office Building (CPP 12).

## 1.4 Constraints and Limitations to this report

The contents of this report need to be considered against the limitations and constraints as follows.

Historical research in this report has been drawn from the *Conservation Management Plan for the Wallarah and Moonee Collieries* at Catherine Hill Bay prepared by EJE Architecture for Rosecorp (2004). No attempt has been made to independently verify the historical research. It is possible that further historical research or the emergence of new historical sources may support different interpretations of the conclusions made in this report.

The register searches undertaken for this report are current only to the date a particular register is searched. In the normal course of events sites are added or removed from heritage registers



and users of the report should check that sites have not been added or removed from a particular register. HLA has relied on the information supplied by register searches and where possible verified the information in site records, however we cannot take responsibility for the accuracy of records submitted to site registers by other parties.

Although this report was undertaken to best archaeological practice and its conclusions are based on professional opinion, it does not warrant that there is no possibility that additional archaeological material will be located in subsequent works.

Opinions on an item's condition are general only and are not intended to be professional architectural or engineering advice on structural condition.

Significance assessment represents a mixture of facts and interpretations tested against established criterion and it is possible that another professional may interpret the historical facts, the physical evidence and apply the criterion in a different way and reach a different conclusion.

## 2 SITE HISTORY

The site history is a summary based on that presented in the Conservation Management Plan (CMP) and much of the history is quoted directly from the CMP.

### 2.1 New Wallsend Coal Mining Company (1874-1876)

Coal mining at Catherine Hill Bay began in 1865 when Jacob Montefiore and Thomas Hale took out a mining lease on 265 acres (Lot 20). At the same time, Robert Saddington and Charles Parbury acquired a total of 635 acres in the area (Lots 17, 18 and 19). Early in 1873, further exploratory work was carried out at Catherine Hill Bay by a Mr. Pembledon, who then suggested the floating of a company to exploit the coal resources of the area. Little is known of Pembledon, but it was Thomas Hale who promoted the Catherine Hill Bay coal, displaying samples in his Sydney office in mid-1874. The company floated was to be known as New Wallsend Coal Mining Company, Hale became Managing Director and his partner, Jacob Montefiore, became Chairman of the Board of Directors.

In July 1873, the directors reported that under the supervision of manager Anders de Flon, a seam was being worked close to the water's edge at the south end of the bay and a pile jetty was under construction, running "right into the face of the workings". Transport of coal to the Sydney market by sea was crucial for the success of the new venture as previous attempts to mine coal in the Lake Macquarie area had failed because of difficulties in moving cargoes through the channel at the Lake's entrance at Swansea.

Although the directors claimed that a jetty was "under construction" in mid-July, work on the structure did not commence until 4 August. In the following December, it was announced that 500ft. of the jetty had been built and the first coal would be shipped within fourteen days. The jetty was reported to be "a very substantial structure", built on piles which had been "drawn a distance of seven miles":

"At the shipping end it is more than 20 feet above high water, with a double line of iron rails laid down for the coal trucks, which run out of the mine on to the jetty, where they are tipped into a long iron shoot, hanging over the vessel's hold."

The first shipment of coal from the New Wallsend Coal Mine was loaded from the jetty into the steamer *Tasmania* on 23 December 1873.

Despite the company's assertions that the jetty was "very substantial", it was described by a journalist in 1876 as being:

"merely a make shift, being a rough structure, tumbled together with apparently no other intention than getting a few hundred tons of coal shipped to Sydney as quickly as possible after the opening of the mine. We observed that many of the piles were "tea tree", not very stout; and what was worse, they were piped, and not being sheathed to protect them from cobra, they must soon rot. Indeed, I observed that new piles had been introduced, and that the jetty, on the side where the steamer loads, had sunk a foot or more, causing the structure to be lopsided, and therefore dangerous. Altogether it is too narrow, and we were not astonished at being told that the company had lost two horses by falling over into the sea".

It remained standing until the mid 1880s when it was burnt down. However, given the jetty's poor condition in 1876, there were probably only remnants left to burn.

The mine worked a 14 foot seam which, in December 1873, extended 150ft in a southerly direction with bords to the east and south-east. By June 1874 it was producing about 300 tons

per week and provided employment for 45 miners and about twenty wheelers and labourers. Two tunnels were driven into the face of the cliff, one containing two 20 horse power engines and Cornish flue boilers, one for draining the mine and one for haulage purposes. By 1875 between 60 and 70 miners were employed, producing from 800 to 1,000 tons of coal weekly, and the town possessed "indications of advancing civilisation".<sup>1</sup> Within a few months of establishing the mine, a house had been built for the manager and a number of "good weather-board shingled cottages" had been completed for the workmen, with several more under construction.<sup>2</sup> By June 1874 there were about twenty small, substantially built houses of uniform design and several tents in the village, with a butchers shop and store.

A severe blow to the company occurred in July 1875 with the loss of its steamer the *Susannah Cuthbert*, en route to Sydney with a full cargo of coal. Production at the mine began to slacken off and in September the miners faced a reduction in wages. According to the *Miners Advocate*, the directors "could not possibly have expected the men to accept it, and to our mind it looks like a quiet way of shutting up the colliery for a time."

In February 1876, rumours began to spread that the pit was about to be closed and deFlon announced that less than a dozen men would be employed until the company enlarged the jetty and made enough skips to hold 200 tons of coal so that vessels could be loaded more economically.

In March 1876 it was announced that the New Wallsend Coal Mining Company had been established with insufficient capital, and was unable to continue working the mine. Operations were suspended and the company wound up, but it was twelve months before Anders de Flon and the few remaining maintenance workers left Catherine Hill Bay for the South Coast area to work at Little Bulli mine. It is understood that much of the plant and buildings were moved to the settlement at Swansea.

## 2.2 THE WALLARAH COAL CO. LTD: 1888-1957

The Wallarah Coal Company was formed in London in September 1888 with a capital of £100,000. The Board of Directors included Charles Parbury, Director of the Union Bank of Australia, who had been a director of the company which established a coalmine at Lake Macquarie in 1879. A local Board, based in Sydney comprised the Hon. Samuel A. Joseph, John De Villiers Lamb and Robert Saddington. Joseph had been a shareholder and director of the New Wallsend Coal Company, and Lamb and Saddington had been partners with Parbury in the Lake Macquarie mining venture.

After receiving a favourable report from an independent expert, Thomas Parton, the Wallarah Coal Company purchased 1200 acres at Catherine Hill Bay, which had been offered for sale by Messrs. Parbury, Saddington and Lamb. The land comprised Lots 16, 17, 18, 19 and 20 of Wallarah Parish, bounded on the west by Lake Macquarie and on the east by a three mile ocean frontage.

Parton was a mining engineer, a Fellow of the Geological Society and a past president of the South Staffordshire and East Worcester Mining Institute. He saw great potential in the Catherine Hill Bay site in terms of coal production and also spoke highly of the "vast supplies of mining timber available on the estate". Parton was also attracted to the site by its sheltered bay, which would favour the construction of a jetty, thereby allowing coal to be exported by sea.

Parton's first task was the selection of a site for the colliery. He decided to tunnel in on the No.1 or upper seam, at a point about 2½ miles north-east of the bay on a hill some 250ft. above sea

---

1 *Sydney Mail*, 17 July 1875.

2 *MA*, 20 December 1873.

level. Having made this decision, plans could be made for the construction of a railway line to carry coal to the jetty where it would be loaded onto ships for transport to various destinations. Another early project was the erection of a sawmill to provide timber for railway sleepers, buildings and pit props, using timber on the estate.

Crucial to the success of the Wallarah venture was a jetty, for the initial setting up of the mine and associated facilities and then for the transport of coal. With this in mind, the London investors secured a special lease "for the purpose of a jetty on piles" in June 1888. As soon as the company was formed in the following September, a tender from "Atlas" Co. was accepted for shoots at the jetty and authority was cabled from London for the commencement of construction, at a site near that of the earlier structure built by the New Wallsend Company.

While the location for the jetty was selected because it was the most protected part of the bay, it was nevertheless an exposed and difficult construction site:

As the bottom was nothing but rock, every pile used had to be fitted with an iron bolt at the end, which was drilled into the rock by divers. At the present time this wharf runs out for a distance of 1,020 ft. and some 40ft. yet remains to be accomplished. In appearance, it is much like any other substantial wharf, except its great height, the planking being 30ft. above high water mark, so as to enable vessels of 3,000 tons to coal at the shoots. It is fitted with two shoots, which can be adjusted to suit the state of the tide or the size of the ship, and it is estimated that 1,000 tons of coal can be shipped in eight hours. On arriving over the receiver of the shoots, the bottoms of the railway wagons are opened and the coal rushes into the hold of the vessel, and as there is a double line of rails the full trucks keep on one set while the empties are taken away on the other.

To protect the structures during heavy easterly gales four large iron cylinders are to be sunk at the end, while near the shoots are two fenders connected with separate piles, so that the rolling of a vessel will not damage the main piles.

The depth of water at the shoots is from 25ft. to 35ft. at low water, and as this amount exists for nearly 600ft. there is ample room for the largest steamer. During the recent heavy south easterly weather the sea was breaking clean over the end of the wharf, but not the slightest damage was done. Mr. Parton considers that when completed it will be equal to the best shipping jetties on the south coast.

Hopper wagons were drawn along the jetty to the shoots by an endless rope of flexible galvanised iron, which passed over a vertical sheave at the shore end, and two horizontal sheaves at the ocean end. The rope was driven by a two-drum winch, powered by steam from a vertical boiler. Wagons were weighed on a Pooley weighbridge near the jetty before being discharged into the ship's hold.

Construction of the railway line was apparently uneventful, but transporting the locomotives and railway stock posed significant problems. Two locomotives had been ordered from Fowler & Co., Leeds but as the only land access to Catherine Hill Bay was a bridle track from Swansea, Parton found it necessary to bring the locos to Sydney in pieces, then ship them to Catherine Hill Bay for assembly at the mine. As there was a gradual incline toward the wharf, the locos were "unusually large".

A similar procedure was adopted for the 100 hopper-shaped wagons, which were shipped from England in pieces and assembled at the site. Made with opening bottoms for loading the coal into vessels at the jetty, they were described as being "exceptionally large, holding 12 tons of coal without being heavily topped". When fifty additional wagons were landed at the site in January 1894, they were assembled in machine shops, which were also equipped to carry out a variety of repairs to ironwork.

By January 1890 the railway had been completed and was described as "one of the best laid lines in the northern district, the rails being of steel, weighing 70lb. to the yard, while it is well ballasted and secured".

Mining occurred away from the location of the study area in a series of shafts and the main activity in the study area was confined to the railway and the jetty. The coal when brought to the surface was screened in an area near the shafts and then loaded for transport to the loader at the jetty. The study area was also the site of the Managers Residence and the accommodation for the Jetty Master.

The mining operations were further developed by the introduction of electric powered coal cutting machines which cut coal in the pillars while the boards were cut by hand. Four shoots were in service at the jetty and night loading was made possible by the provision of electric lights which were powered by a steam driven Siemen Bros. 250 volt 0-20 amp and 400-475 rpm dynamo.

Widespread strike action was taken by most major unions in 1917 after the NSW Government organised volunteers to carry out the work of striking railway workers. The Government commandeered all coal mines in the state and recruited volunteers to work them. Strike-breakers were accommodated in camps near the mines and the largest camp, housing over 400 men, was at the Wallarah colliery. Tensions in the town were high, as the strike-breakers lived and worked under police guard. On 30 August, two piers of the jetty were damaged by an explosion of gelignite, planted under cover of darkness. The Acting Premier, Fuller, made arrangements for increased security by ordering the jetty area to be lit at night and sending additional police to act as guards.

This industrial disruption continued into the 1920s and 1930s as economic fluctuations impacted the coal industry as a whole. Miners launched industrial struggles to maintain and improve working conditions while the mine owners struggled to keep costs down.

In 1921 the jetty was described as being:

1154 feet in length including approach spans constructed of hardwood framing on turpentine piles. Equipped with 4 movable coal shoots, 3 ton jib crane, vertical boiler and warping winch, 4 hand winches, 1 direct coupled engine and generator for lighting, store room, 3 inch water piping from tanks, windmill pump and tanks, boat davits and boat hawsers and moorings for (a) large steamers, (b) small steamers. Two railway lines on main jetty, one line on shore end. Valued at £35,000.

In 1929 the Chairman of the company reported that it had been necessary to close both mines "owing to high prices that must be charged to consumers because of repeated strikes which had led, through the Arbitration Court, to increased production costs". This was part of the industry wide dispute known as the Great Strike or Great Lockout. It coincided with the onset of the Great Depression, which undermined the strikers as closing the mines reduced the owners costs at a time when demand for coal had largely collapsed.

If there was an improvement in industrial relations during the early 1930s, it was virtually cancelled by the introduction of mechanisation into the Wallarah mine. It was one of the first in the district to become mechanised when Joy 8-BU loaders and Samson Arcwall coal cutters were installed in 1936. The introduction of mechanisation into the mining industry was often accompanied by stoppages, generally because of fears about the safety of the new equipment. The resulting unemployment was also a cause for unrest at Wallarah, where it was reported in 1938 that more than 150 miners had been unemployed for 12 months, largely due to the introduction of mechanisation into one of the mines

Wartime legislation also impacted on the profits of the Wallarah mine, which faced price control of coal as well as increasing labour and materials costs due to war time shortages. Production levels also declined during this period, causing the Directors "a great deal of anxiety" with 1942 being a particularly dismal year. Despite recording a record low in the number of idle days, the output per shift declined in comparison to the previous year's figures. Output continued to decline over the next few years, partly due to war-time difficulties in obtaining replacement parts for a large number of minor breakdowns.

Improvements in mining conditions were introduced in 1945 to conform to the requirements of the Coal Mines Regulation Act. Underground transport was installed to convey miners to their working places. At Wallarah an electric storage battery type locomotive was installed, together with a battery charging station. The Act also required the provision of additional bath and changehouse accommodation which was erected according to specifications approved by the Government.

In 1946 the Commonwealth Government and NSW State Government established the Joint Coal Board and the Coal Industry Tribunal to "regulate, assist and rehabilitate the coal industry within the framework of private ownership". Functions of the Joint Coal Board included the promotion of the welfare of workers in the coal industry, and the improvement of pit and community amenities.

A feature of the Wallarah company's operations at that time was its ability to process seven sizes of coal at its screening plant, which was one of the largest in the Commonwealth. Further improvements were made in 1949 with the installation of a new mechanical unit, further increasing the daily output of the mine. A new bath and changehouse was also constructed at this time<sup>3</sup>. Improvements in the early 1950s included the construction of buildings at "F" Tunnel and the installation of a new coal box and screening plant, fabricated and installed by Goninans. A new bath and change house at the jetty was also built at this time. Most of these facilities existed at the mine rather than within the study area.

In 1955, the Wallarah Coal Company Ltd. shareholders accepted an offer from J & A Brown Abermain Seaham Collieries Ltd. (JABAS). Five years later, JABAS merged with R.W. Miller and Caledonian Collieries to form Coal and Allied Industries. Shortly after acquiring the colliery, the new owners initiated a programme of complete modernisation, carried out in two stages. After improving the underground face units and haulage, and creating a new entrance into the mine, it was planned to install a new coal preparation plant, together with a conveyor system to transport coal from the new drift to the jetty.

## 2.3 1964: NEW COAL LOADING PLANT

In the second phase of the development programme, a new coal loading plant with a capacity of 1,500 tons per hour, came into operation in 1964. It replaced the earlier system by which coal was carried by lorry to the screening plant at Middle Camp, then transported in 10 ton rail cars to the wharf and dumped into the ships.

Designed by Mr. E.F. Hewett, the General Superintendent of Coal and Allied, the plant was built over two years by Hexham and Engineering, a subsidiary of Coal and Allied. It comprised the ship-loader, storage bin and washing, crushing and screening plant. The operation of the new plant was described in *Australian Coal, Shipping, Steel and the Harbour* in May 1964:

The ship loader head is mounted on rails on the wharf and can load along the whole length of a ship. It has its own electrical power unit for movement and is controlled by a driver in a cabin in

---

<sup>3</sup> Wallarah Coal Company Ltd., Register of Fixed Assets 1948-63, ML MSS 3876/3

the head. The conveyor belt that brings coal along the wharf to the head is also mounted on rails and can be extended to 1,000 feet. It is retracted into a housing on the wharf when not working to protect it from the weather and the sea air.

Coal is fed onto the conveyor from the 13,500 ton capacity storage bin sunk into the cliff above the wharf. Push-button controls in the ship-loader cabin can feed any one of six sizes of coal from compartments in the big bin on to the conveyor. Coal is brought to the new plant by lorry along a road a mile and three-quarters long, built by the company, from the company's Wallarah Colliery at Crangan Bay.

Lorries dump the coal into a concrete pit near the plant on the cliff top and a conveyor belt carries it into the washing plant. The coal is crushed after washing and then carried by conveyor belt to the screening plant, where it is graded into six sizes and delivered by belt to the 13,500 ton storage bin.

Following a severe cyclone in May 1974 the Catherine Hill Bay jetty and was so badly damaged that it was necessary to cease loading operations. Early in 1975 the old jetty, of timber decking and piles, was replaced by one of concrete decking and steel piles.

As well as modernising the Wallarah colliery, Coal and Allied opened two new mines: Chain Valley, developed in the 1960s to provide coal for Vales Point Power Station, and Moonee, opened in 1982 to permit recovery of the last coal from the Wallarah seam. It was originally opened as "F" Pit in the mid 1940s but was developed as a separate mine after the closure of "E" Pit in 1963.

In 1984, it was estimated that there was enough coal in the Wallarah seam to keep the mine open for five to six years, but development in the Great Northern Seam would extend its life to twenty years. By the early 1990s Coal and Allied's three Lake Macquarie mines – Wallarah, Moonee and Chain Valley – had become unprofitable. Operations at Wallarah and Moonee were substantially reduced in 1992 and 280 mine workers were retrenched

In December 1993, Coal and Allied sold the collieries to the Wallarah Joint Venture, a consortium backed by the AMP Society. The Wallarah, Moonee and Chain Valley mines were operated by Coal Operations of Australia (COAL), an organisation formed around former Coal and Allied executive Tony Haraldson and two of his colleagues. However as a result of continuing operating losses the business closed in 2002.

## 2.4 Historic Themes

Contextual analysis is undertaken to place the history of a particular site within relevant historical contexts in order to see how typical or unique the history of a particular site really is. This is usually by understanding a site's history in relation to broad historical themes characterising Australia's history. Such themes have been established by the Australian Heritage Commission and the NSW Heritage Office and are outlined in synoptic form in *New South Wales Historical Themes* issued by the NSW Heritage Office (2001).

The relevant theme is mining as presented in **Table 1**. . It is noted however, that technically under this definition coal mining is excluded, as coal is not an ore or an inorganic substance, however coal mining does not fit under any other theme.

**Table 1: Historic Theme**

Australian Theme	NSW Theme	Notes	Examples of evidence
3. Developing local, regional and national economies	Mining	Activities associated with the identification, extraction, processing and distribution of mineral ores, precious stones and other such inorganic substances.	Mine, quarry, race, mining field or landscape, processing plant, manager's office, mineral specimen, mining equipment, mining license, ore laden shipwreck, collier, mine shaft, sluice gate, mineral deposit, slag heap, assay office, water race.

It terms of the history of the study area there are three main uses

### **Jetty and Railway**

The collieries at Catherine Hill Bay are unique in the context of The Hunter Valley in that the coal was discharged and transported from a fairly exposed jetty. Other Hunter Valley mines railed the coal to either Newcastle or Hexham for loading. These were sheltered locations and good harbours. However, on the south coast there were a number of mines using similarly exposed jettys. They all had a shared experience of difficult operations in rough seas and almost every jetty collapsed at one point in its history.

Colliery railways were quite common on most coal fields.

### **Coal Preparation**

The development of coal washing relates to the complaints about poor quality coal from the Hunter Valley fields. For example, during World War II and the post war period the brick industry outside NSW complained bitterly about the poor quality of coal it received. Coal was noted for containing high levels of stone and other rubbish, qualities of ash and sundry foreign objects (such as chains and couplings). A long series of complaints is documented in the *Clay Products Journal* from 1942 onwards until the late 1950s. Representatives from the industry met with the Joint Coal Board as well as various Parliamentary bodies, both State and Commonwealth. It is notable that in the early 1950s the clay industry met with representatives from the electricity and gas providers to discuss the problem.

Washing of coal was a means to overcome this problem and supply a superior quality product to the client.

Coal was initially screened and the larger pieces broken down to a suitable size. Washing involved the washing of coal in a solution in a drum or box. The coal having a lighter specific gravity than impurities was floated off while the rubbish and impurities sink. The washery refuse was removed and stored for emplacement elsewhere. The coal was then dewatered and screened to sort into standard sizes. The coal was stored in bins from which it was unloaded for transport.

The first coal washerie were built by J & A Brown Abermain Seaham Collieries (JABAS) at Hexham and by BHP Coal at Hepburn No 2 colliery in the late 1957 and thereafter coal

preparation plants were constructed at major plants or loading facilities. This historical record does not indicate that the coal washery was unique in any way apart from the underground coal bins and the jetty loading which were simply a function of geography.

### **Company Residences**

Company Residences for officials were very common on mines across NSW. The residences within the study area are therefore unremarkable in historical terms.

### 3 PHYSICAL DESCRIPTION

This section describes the Industrial heritage and historical archaeological items within the study area.

#### 3.1 Remnants of Coastal Railway Line (CPP 1)

The remains of the Colliery railway line can be followed for some distance along the coast to the jetty (**Plate 1**). The remains consist of the formation constructed for the railway to run on. These are embankments and cuts. Where the railway ran over Catherine Hill Creek entering Catherine Hill Bay a bridge was constructed, and the timber abutments for this structure survive (**Plate 2**).

There are no remains of the track.

The railway formation is used for the current road around the Surf Club to the jetty (**Plate 3**). Where the jetty commences there is a brick building, which is believed to have been a wash house for the jetty workers. Adjacent to this are foundations for a structure, which seems to be some form of coal bin and conveyor (**Plate 4**). This bin is visible on Plate 24 of the CMP, which is dated to 1964 but is not visible in Plate 32 in the CMP which dates to March 1958. This suggests that the structure was constructed at the around the same time as the Coal Preparation Plant possibly to allow coal to be loaded without going through the washery.

#### 3.2 Mine Managers Residence (CPP 2)

This site was occupied and was not inspected in detail but was observed from the property boundary (**Plate 5**).

#### 3.3 Jetty Masters House (CPP 3)

This site was occupied and was not inspected in detail but was observed from the property boundary (**Plate 6**).

#### 3.4 300 tonne bunker (CPP 5)

This was where coal was brought by truck and unloaded. It consists of a large concrete slab with a rectangular bunker in the middle of it which is filled (**Plate 7**). Underneath is a 42" conveyor which ran from the bin to the washery primary screens (**Plate 8**). The length of this conveyor was not inspected due to potential OH & S issues.

#### 3.5 Washery (CPP 6)

The washery building itself has been demolished. According to the CMP (2004:72) this occurred in March 2003. All that remains of the plant are concrete foundations (**Plate 9 & 10**). While these occupy a fairly large area and show the locations of where the parts of the washery were, the actual components of the plant the screens, the conveyors, bins ...etc were all located above the ground surface so while their foundations are preserved the machinery and equipment is not.

It is of interest to note that the plan of the washery presented in Plate 24 of the CMP (dated at 1964) is slightly different from that presented as the site plan immediately prior to demolition. This indicates that there have been changes to the washery over the last 40 years, which is not all that unexpected.

### 3.6 Bin Building (CPP 7)

This item consists of six massive concrete bins constructed in the cliff face. Washed coal was brought by conveyor to screens located on the southern side within the building. Conveyors running along the top of the bins then distributed the screened coal into the bins. These made sure that the coal was evenly distributed across the bins. There were six bins. The two largest were at the western end of the building and were the same size being 28m deep and collectively holding 6500 tons of coal. The next bin was 25m deep holding 2875 tons of coal. The fourth bin was 23m deep holding 2350 tons of coal. The last two bins were both 21m deep holding 875 tons and 800 tons of coal respectively. The coal was bottom discharged onto a single conveyor, which took the coal out over a "weighometer", and onto the jetty.

The bins were constructed from reinforced concrete. The structure above the bins is shown on the plans as being corrugated asbestos cement sheet on the roof and walls. This is now corrugated galvanised iron.

**Plate 11** shows the southern face of the Bin Building and shows where conveyors from the washery joined with double deck screens. **Plate 12** shows the western face of the Bin Building. There seems to have been some form of loading facility (now demolished) that entered the building from the west (this is shown on the current site plan). **Plates 13 & 14** show how the conveyors sit on the bins. **Plate 15** shows the conveyor without its belt. **Plate 16** shows the distributor, which moves up and down the conveyor belt. **Plate 17** shows a further conveyor system, which seems to run at right angles to the other conveyors. This ties in with the loading facility noted on the western wall and would have allowed coal to be moved across the bins without going through the washery facility.

**Plate 18** shows the reinforcing for the concrete bins. The space under the bins was filled with water and so partially inaccessible for safety reasons. **Plate 19** shows the remains of the conveyor under the bins.

### 3.7 Original Workshop (CPP-9)

This building is identified as the original workshop for the Coal Preparation Plant. **Plate 20** shows the building and **Plate 21** shows details of the shutter type windows. From an industrial heritage perspective nothing of importance remains in this building.

### 3.8 Jetty (CPP-8)

A jetty has been in this location since 1888 and probably from 1873. The original jetty ran straight into the mine entry. The 1888 jetty curved around the coast to join with the railway line. From the photographs and plans in the CMP, the jetty was of timber construction. The basic construction consisted of a timber upper deck resting on timber piers consisting of three piers, the middle driven straight and the others at an angle, diagonally braced on either side with wales about ¼ of the way up the pier and at the top. The first nine piers stood separately but the others were fore and aft braced by timbers joining the lower wales.

The piers in the sea consisted of two vertical piles and piles at an angle to brace the pier. It was important not only to brace the jetty to withstand the sea but also the impact of ships docking. It seems from Plate 26 in the CMP that the jetty had two tracks on it (proud of the deck) and had hand rails on either side.

Coal was brought onto the jetty by rail and it appears the wagons were run up to (probably winched up) a small ramp where they would have discharged into a coal box from which the ships were loaded by four movable shoots into their cargo holds. The empty wagons were switched to another line and run down to be picked up.

A timber jetty such as this was a high maintenance affair. Apart from potential damage from collision and rough seas the timbers would have been exposed to attack from marine borers as well as general wear and tear so that most timbers would have been replaced over a 20 year period.

The 1964 period improvements to the coal loading involved replacing the railway with a conveyor taking coal from the bottom of the bins. The conveyor discharged into a movable shiploader. The accompanying image with the plan shows that the jetty is still timber and some of the redundant rails are visible. The jetty would have been extended to run into the bin and may have been widened to take the shiploader. The four shoots would have been removed.

In 1974 the Jetty was severely damaged by a storm and a new jetty was commissioned in 1975. This jetty was reconstructed using metal piers and a different form of ship loader.

The remains of the wooden structure are that section from the jetty to the bin constructed c1964. The remaining jetty structure dates to 1975. The ship loader and the conveyor system have been removed. There is some evidence of the former structures in the form of miscellaneous objects in the sand.

### 3.9 Substation (CPP 10)

The Sub-station was not able to be opened and therefore the interior was not able to be inspected, however it is noted that the external transformers have been removed.

### 3.10 Workshop and Bathhouse (CPP 11)

This is a very modern building dating to the 1970s, used as a workshop for the CPP and Moonee Colliery. It contains a central open space with an electric powered overhead crane in it (**Plate 28**). All other machinery has been removed. On the northern side is a modern bathhouse while offices are located at the eastern end.

### 3.11 Office Building (CPP 12)

This building was demolished and all that remained were concrete foundations (**Plate 29**).

### 3.12 Summary of physical evidence

Generally the majority of the physical evidence relates to the establishment of the Coal Washery on this locality in 1964. Little remains from the period prior to this time the exceptions being:

- Mine Managers Residence (CPP 2); and
- Jetty Masters House (CPP 3)

which would seem to date to the 1880s period.

### 3.13 Site Condition and Integrity

Generally the overall condition of the remains are good, as presented in **Table 2**, which is not surprising since they were only operating a few years ago. Demolition has impacted on some sites.

**Table 2: Condition and Integrity**

Item	Condition and Integrity
Remnants of Coastal Railway Line (CPP 1)	Intact but lacking tracks and bridges
Mine Managers Residence (CPP 2)	Good
Jetty Masters House (CPP 3)	Good
300 tonne bunker (CPP 5)	Good
Washery (CPP 6)	Demolished foundations only
Bin Building (CPP 7)	Good although lacking some components
Original Workshop (CPP-9)	Good
Jetty	Good (based on 1975 jetty) but lacking conveyor.
Substation (CPP 10)	Appears to be good
Workshop and Bathhouse (CPP 11)	Good
Office Building (CPP 12)	Demolished foundations only

### 3.14 Archaeological Potential

Archaeological Potential is defined by the NSW Heritage Office Archaeological Assessment Guidelines “as the degree of physical evidence present on an archaeological site” (1996:34). It should be noted that archaeology in the *Archaeological Assessment Guidelines* is defined as “any physical evidence of past human activity” (1996). This is an extremely broad definition rendering it almost impossible in practice to define an area as having no archaeological remains. The reason for this is that under the provisions of the NSW *Heritage Act* all relics are protected irrespective of their significance although they are managed according to significance. To overcome this problem the definition of low potential has been widened slightly to include areas of minimal archaeological remains.

Assessment is consequently a two-part process. The first is to see whether there is evidence both documentary and physical that an activity occurred on a piece of land that could have created or contributed to the archaeological record. The second is to see whether further archaeological research using the presumed or established archaeological record of a place can help answer relevant research questions (as envisaged under Criterion e of the significance assessment guidelines).

Archaeological potential was sub-divided into the following categories based on the likely occurrence of archaeological material. These are:

- High Potential – Areas with known archaeological remains.
- Medium Potential – Areas that may have archaeological remains based on other lines of evidence such as maps or documents.
- Low Potential – Areas that are likely to have minimal or no archaeological remains.

Areas with known archaeological remains and therefore having high potential are

#### **Remnants of Coastal Railway Line (CPP 1)**

The formation of the railway is visible.

#### **Washery (CPP 6)**

Foundations of the washery are visible on the ground

#### **Office Building (CPP 12)**

The Office building foundations are visible on the ground.

#### **Jetty (area below)**

There are evident remains relating to the jetty observable along the coast and it is likely, there are remains of the piles from the various jetties erected in this area under the floor of Catherine Hill Bay. In a report on excavations under the Fremantle Jetty it was shown that items dropped from the jetty over time were recoverable. But unlike Fremantle, which was a general cargo jetty, the jetty at Catherine Hill Bay was only for loading coal so it seems likely that only coal would be recovered from any archaeological excavations under the jetty.

It is possible that some underfloor archaeological evidence would be located under the Mine Managers Residence (CPP 2) and the Jetty Masters House (CPP 3). This is a typical case for any house. These two sites would be considered to have medium potential.

#### **Ability to answer pertinent research questions**

Archaeological significance has traditionally been seen in terms of Criterion (e) that is “the potential to yield information...”. The Archaeological Assessment Guidelines comment, “the key test that must be applied in understanding the scientific research values of a known or potential archaeological site is the question of whether further studies of the physical evidence may reasonably be expected to help answer research questions” (Archaeological Assessment Guidelines 1996:26). Therefore it is important to consider the sort of questions the study area may be able to answer.

The overall assessment in the CMP (p159) is that “The complex has high technical research significance. Alterations, additions and modifications on the site show the phase of coal mining expansion. Much of the infrastructure, components and occupation of the site represent changes in technology spanning more than a 100 years of coal mining in Australia. In general, the quality of the remaining structures is high, demonstrating technical excellence in both design and construction”.

The items of high potential are discussed below in relation to this overall assessment

#### **Remnants of Coastal Railway Line (CPP 1)**

The research potential of the railway formation is low, the nature and location of the railway is already known, as is the nature of the traffic on it.

**Washery (CPP 6)**

The research potential of the washery is low as there are not sufficient remains to investigate and to answer questions about how it operated. A better source of information might be oral history and searching the archival records of Coal and Allied at the University of Newcastle.

**Office Building (CPP 12)**

The research potential of the Office building foundations is low as there are not sufficient remains to investigate and to answer questions about how it operated.

**Jetty (area below)**

While it is likely that there are some remains from earlier jetties under the sand they are likely to be in poor condition due to immersion in salt water. It does not seem likely that these remains will be able to answer research questions about the jetty and its use.

The two sites that are considered to have medium potential are the Mine Managers Residence (CPP 2) and the Jetty Masters House (CPP 3). There is some research potential to use any subsurface remains to look at contrasting life styles between Management and workers (assuming some workers houses or sites were excavated).

## 4 SIGNIFICANCE ASSESSMENT

This section discusses the industrial heritage and historical archaeological significance of the study area in the context of the previous overall assessment of significance for the whole site presented in the CMP.

### 4.1 Determining Heritage Significance

An assessment of significance is undertaken to explain why a particular site is important and to enable the appropriate site management to be determined. The basis for assessing cultural significance is the ICOMOS Australia Burra Charter and associated guidelines. In NSW, these have been adopted with modifications.

These were first outlined in the *Heritage Assessment Guidelines, NSW Heritage Manual*. The *Heritage Assessment Guidelines* established six evaluation criteria (which reflect four categories of significance and whether a place is rare or representative) under which a place can be evaluated in the context of State, Regional or Local historical themes. These Guidelines were replaced in August 2001 by the guideline *Assessing Heritage Significance*, which reflects legislative changes to the Heritage Act. It is understood that the guidelines in the Heritage Manual will be successively upgraded to reflect the new assessment criteria.

The Heritage significance criteria are:

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

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

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

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

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

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

**Criterion (g)** – an item is important in demonstrating the principal characteristics of a class of NSW's:

cultural or natural places; or  
cultural or natural environments.

(or a class of the local area's:  
cultural or natural places; or  
cultural or natural environments.)

Analysis of a heritage item against these criteria allows an assessment of the level of significance of an item, being either of local or state heritage significance. Should an item be so

altered that it fails to meet the significance criteria, a significance assessment may not be able to be made.

Different components of a place may make a different relative contribution to its heritage value. Loss of integrity condition may diminish significance. In some cases, it may be useful to specify the relative contribution of an item or components. Table 3 summarises the Significance Gradings outlined in the NSW Heritage Manual, *Assessing Heritage Significance* (2001). While it is useful to refer to this table when assessing this aspect of significance, it may need to be modified to suit its application to each specific item:

**Table 3: Significance Grading**

Grading	Justification	Status
<b>Exceptional</b>	Rare or outstanding item of local or State significance. High degree of intactness. Item can be interpreted relatively easily.	Fulfils criteria for local or State listing
<b>High</b>	High degree of original fabric. Demonstrates a key element of the item's significance. Alterations do not detract from significance.	Fulfils criteria for local or State listing.
<b>Moderate</b>	Altered or modified elements. Elements with little heritage value but which contribute to the overall significance of the item.	Fulfils criteria for local or State listing.
<b>Little</b>	Alterations detract from significance. Difficult to interpret.	Does not fulfil criteria for local or State listing.
<b>Intrusive</b>	Damaging to the item's heritage significance.	Does not fulfil criteria for local or State listing

## 4.2 Overall Site Assessment

The way the overall site meets the Heritage Office criterion is outlined in pages 157-162 of the CMP which are reproduced below.

### **The item is important in the course or pattern, of NSW or local cultural/natural history**

The site is integrally linked with the history and development of coal mining in NSW. The history of the site parallels and demonstrates the history of coal mining in NSW. The first phase being the purchasing of the mining lease, expansion, change of direction and technological change and gradual decline and finally closure.

The site and its significant components are an expression of a particular era of a region – expansion of coal mining and the development of the Catherine Hill Bay Village. It was an active agent in the creation of the isolated mining town of Catherine Hill Bay.

There is a distinctive multi-layering and continuity of mining activity evident at the site. The site displays evidence of the early occupation of the site by an early mining company and of mining for over 114 years. Despite the scarcity of intact nineteenth century colliery relics and structures within the Wallarah and Moonee Colliery holdings at Catherine Hill Bay, the colliery precinct and transport structures are the result of the historical development of the area as a viable and economic mining operation.

**The item is important in relation to a person, or groups of persons of importance to NSW or local cultural/natural history**

The site and its infrastructure are associated with the life and work of early mining persons and companies – individuals whose life and work made significant contributions to the establishment and development of the Catherine Hill Bay community.

For the associated rich collection of documents including drawings, photographs, maps, schedules, papers – relating to the activities and events at the Collieries, and the lives of staff, which considerably enliven and inform our understanding of the place.

The site was a key site in many union activities including many strikes. There is physical evidence of improved working conditions gained by the unions, such as the addition of ablution facilities and lighting.

**The item is important in demonstrating aesthetic characteristics and/or high degree of creative or technical achievement in NSW or local area**

The site can claim some degree of aesthetic value from the scale of the buildings in the complex, the relative unity of materials and the subtle use of continuing architectural themes of various periods and building types.

Many of the remaining buildings and structures could assist in a further understanding of 20<sup>th</sup> century colliery layout, building construction, working lives of the colliery's employees and the evolving processes by which coal production was mechanised. In particular, the gradual mechanisation of transport systems central to the coal mining operations can be readily interpreted at the site.

The site has landmark qualities experienced in the views and vistas to and from the site. With respect to landscape issues, the colliery has had an important impact on the local area resulting in changes to the landscape. The landscape of the site itself, although not well endowed with cultural plantings, still conveys attitudes and practices of a former era.

The site and its components have been a consistent and recognisable image in Catherine Hill Bay. The relationship the colliery with the town of Catherine Hill Bay is an important issue. Even today, Catherine Hill Bay is characterised by the presence of the jetty and other related mine structures.

**The item has a strong or special associations with a particular community or cultural group in NSW or local area**

For the use of the site and its buildings, and the many people who have worked in it and relied upon it for their livelihood, many in the local community regard the site with respect and affection. Over its life, substantial numbers of the local community worked at the collieries and many of these workers have a strong identification and sense of pride in the place.

The site was integral to the development of the surrounding local community of the Catherine Hill Bay Villages and has important physical and social association with the area. The impact on the local community appears to have been largely in the historic development of the housing around the site and in the inter-relationship with the site as

a major workplace. The collieries have become an emerging focus of community consciousness as to its source of being.

**The item has the potential to yield information that will contribute to an understanding of NSW or local cultural / natural history**

The complex has high technical research significance. Alterations, additions and modifications on the site show the phase of coal mining expansion. Much of the infrastructure, components and occupation of the site represent changes in technology spanning more than a 100 years of coal mining in Australia. In general, the quality of the remaining structures is high, demonstrating technical excellence in both design and construction

The site has the historic resources to answer research questions posed about many aspects of early twentieth century coal extraction techniques, the development of industrial infrastructure or social structure on early twentieth century coal fields. The heritage theme of mine development is well represented at this site and is of educational and interpretative value as part of the evolution of the processes of coal mining.

**The item possess uncommon, rare or endangered aspects of NSW or local cultural/natural history**

The transport of coal at the Wallarah and Moonee Collieries was unique to the site. Most other collieries had coal taken intrastate, interstate or overseas via the Port of Newcastle. The mining of coal, its transport then loading all within the one colliery holding at Wallarah and Moonee Collieries is a special feature. It did this for the whole period of operation.

**The item is important in demonstrating the principle characteristics of a class of NSW or local cultural/natural places or cultural/natural environments**

The current physical form of the site, the buildings, the spatial arrangement, artefacts, and open space demonstrate the process of coal mining techniques originating in the early twentieth century and continuing successfully with modification for over a century.

The heritage theme of mine development is well represented at this site, enabling many aspects of the progression of coal mining technology to be demonstrated and understood. Its life span, over 114 years, embraces a century of technological and social change in the coal industry, mechanisation, economic depression, industrial conflict, safety and family tradition. The site has the historic resource to answer questions posed about many aspects of coal extraction techniques over the twentieth century and the development of industrial infrastructure or social structure on coal fields.

## 4.3 STATEMENT OF SIGNIFICANCE

The following Statement of significance was prepared in the CMP.

“The subject site including Wallarah and Moonee Collieries and the Catherine Hill Bay Coal Preparation Plant is assessed as having State significance culturally, in the context of the contribution to the coal mining history of NSW. This site is one of the only surviving in the region that demonstrates the operational techniques; scale and layout of pit-top operations and its associated colliery structures; and, the physical integration of place of mining work and associated village.

The significance of the subject site is based not only on individual structures but amplified by the complex of buildings and their context within the landscape. The Wallarah Colliery together with the Moonee Colliery form a historically significant place both on a State and local level as a fine example of a viable and economic coal mining operation that provides evidence of the working and living environments of a workforce on which the regional and state economies were substantially dependent. Buildings, open spaces, circulation infrastructure, rail relics, machinery and services demonstrate the processes of coal mining, as well as the technological and operational changes embraced between 1873 to the present day.

The cultural significance of the site in its present condition relies more on the complex as an expression of a particular era of a region's industrial and social history than on the integrity of the remaining structures. That era is the establishment and development of the Wallarah and Moonee Collieries and the mining community and transportation network that evolved to support that industry.

The collieries were integral to the development of Catherine Hill Bay Village and have an important physical and social association with this area. The place has strong cultural, social or spiritual associations for substantial numbers of the local community, including those who worked at the site or had their local business supported by the workers. The proximity of the colliery to the historic town of Catherine Hill Bay, and the surviving former company owned residential buildings in the village, further demonstrates the close relationship that developed between early collieries and their local communities.

Its life span, over 114 years, embraces a century of technological and social change in the coal industry, mechanisation, economic depression, industrial conflict, safety and family tradition. The site has the historic resource to answer questions posed about many aspects of coal extraction techniques over the twentieth century and the development of industrial infrastructure or social structure on coal fields. The heritage theme of mine development is well represented at this site, enabling many aspects of the progression of coal mining technology to be demonstrated and understood.

The place has landmark qualities experienced in the views and vistas to and from the site, particularly from the Bin Building to the ocean. Even today, Catherine Hill Bay is characterised by the presence of the jetty and other related mine structures.

The significance of the collieries' locations on a sea port should not be underestimated. The viability of the workings relied on this strategic location for 114 years. The ability to import raw materials and export product has ensured the continued success of the site. In particular the jetty signifies the importance of the location and helps to interpret certain requirements for the establishment of the site and the need to transport raw materials by sea to selected sites.

The site has the historic resources to answer research questions posed about many aspects of early twentieth century coal extraction techniques, the development of industrial infrastructure or social structure on early twentieth century coal fields. The heritage theme of mine development is well represented at this site and is of educational and interpretative value as part of the evolution of the processes of coal mining." (CMP 2004:161-16).

## 4.4 Assessment of the current sites

Overall the results of this study do not act to alter the substance of the Statement of Significance. It should be noted that the whole method of loading installed in 1964 is unique in the NSW context as none of the collieries in a similar geographic circumstance were operating in the 1960s and therefore did not have modern loading facilities. The 13500 ton bin is also unique on a NSW coal mine due to its size and underground location.

The assessment of archaeological potential should also be noted as this is not as optimistic as the overall assessment.

### 4.4.1 Review of Individual item assessment

Each item has been assessed in the CMP (2004:129-154). That assessment has been modified for the items assessed for their industrial heritage significance in the current study by adding comment under criterion c, e f & g of the assessment criterion outlined above.

#### **Remnants of Coastal Railway Line (CPP 1)**

- Does not meet Criterion c
- Does not meet Criterion e
- Does not meet Criterion f

Meets Criterion g as the railway formation is important in demonstrating how coal was transported to the jetty

#### **Mine Managers Residence (CPP 2)**

- Does not meet Criterion c
- Does meet Criterion e as the site has some archaeological potential
- Does not meet Criterion f
- Does not meet Criterion g

#### **Jetty Masters House (CPP 3)**

- Does not meet Criterion c
- Does meet Criterion e as the site has some archaeological potential
- Does not meet Criterion f
- Does not meet Criterion g

#### **300 tonne bunker (CPP 5)**

- Does not meet Criterion c
- Does not meet Criterion e
- Does not meet Criterion f

Meets Criterion g as the coal bunker is important in demonstrating how coal was transported to the jetty.

#### **Washery (CPP 6)**

- Does not meet Criterion c

- Does not meet Criterion e
- Does not meet Criterion f
- Does meet Criterion g as the archaeological footprint can demonstrate the outline of the coal washery a critical part of post-war mining in the Hunter Valley.

#### **Bin Building (CPP 7)**

- Does not meet Criterion c –note the concrete structure is not a particularly advanced structure for its time.
- Does not meet Criterion e
- Does meet Criterion f as the bins are unique on a NSW colliery
- Does meet Criterion g as the remains, especially the conveyors, demonstrated the principal characteristics of coal handling and storage on this site..

#### **Original Workshop (CPP-9)**

- Does not meet Criterion c
- Does not meet Criterion e
- Does not meet Criterion f
- Does not meet Criterion g

#### **Jetty**

- Does meet Criterion c in terms of its aesthetic characteristics
- Does not meet Criterion e
- Does meet Criterion f the Jetty is a unique structure
- Does meet Criterion g as the Jetty demonstrated to a high degree the principal characteristics of a specialist coastal coal loading facility

#### **Substation (CPP 10)**

- Does not meet Criterion c
- Does not meet Criterion e
- Does not meet Criterion f
- Does not meet Criterion g

#### **Workshop and Bathhouse (CPP 11)**

- Does not meet Criterion c
- Does not meet Criterion e
- Does not meet Criterion f
- Does not meet Criterion g

#### **Office Building (CPP 12)**

- Does not meet Criterion c
- Does not meet Criterion e
- Does not meet Criterion f
- Does not meet Criterion g

## 5 MANAGEMENT

### 5.1 Statutory Controls Relating to Heritage

The nature and level of controls in the study area are set out below. The relevant statutory controls to protect cultural heritage are outlined below. It should be remembered that the legislation has different applications according to the nature of the landowner.

#### COMMONWEALTH

##### **Environment Protection and Biodiversity Conservation Act (as amended 2003)**

This Act was amended to protect heritage places of National significance or which the Commonwealth owns. The amendments replaced the Australian Heritage Commission with the Australian Heritage Council and created a Commonwealth Heritage list and a National Heritage List (neither of which have been established yet). Actions by the Commonwealth or any actions having a significant impact on items on the above two lists or the Register of National Estate will have to be referred to Environment Australia for consideration.

The Register of the National Estate was searched on the 7 November 2004

#### NEW SOUTH WALES

##### *Heritage Act 1977 (as amended 1998)*

The *Heritage Act (1977 as amended 1998)* was passed to conserve the environmental heritage of New South Wales. The Heritage Act is binding on all State Government agencies. Items of heritage significance are protected by the means of Interim Heritage Orders or by listing on the State Heritage Register. Short-term orders under section 130 of the Act, which were abolished in the 1998 amendments, continue for three years after the repeal of section 130 by the amendments.

The State Heritage Register was searched on the 7 November 2004.

Section 139 of the Heritage Act also includes additional special provisions passed to protect "relics". A "relic" is defined as meaning *"any deposit, object or material evidence:*

- (a) *which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and*
- (b) *which is 50 or more years old.*

Section 139 further states:

- 1) *A person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.*
- 2) *A person must not disturb or excavate any land on which the person has discovered or exposed a relic except in accordance with an excavation permit.*

There is no formal register of "relics" held by the NSW Heritage Office. Some of the sites listed on the State Heritage Register or on LEPs may either be "relics" or have relics associated with them. The NSW Heritage Office is the consent authority for these relics, and they cannot be disturbed in any way without an approved Section 140 (Excavation Permit) application.

For items listed on the State Heritage Register, a permit is required to carry out activities to an item (section 60). A permit is also required for activities that would affect known or potential archaeological relics (section 140).

Finally, under section 146, a person who is aware or believes that he or she has discovered or located a relic must report it to the NSW Heritage Council within a reasonable time.

### **Exceptions to Section 139**

If the proposed works are only minor in nature, and will have minimal impact on the heritage significance of the place, they may be excepted from the provisions of section 139. On the 7 of March 2003 the Minister for Planning revoked all existing standard exceptions and granted new exceptions. The new standard exceptions relate to a broader range of minor development and will result in a more streamlined heritage approval process. The exceptions are set out below.

‘Excavation or disturbance of land of the kind specified below does not require an excavation permit under s.139 of the Heritage Act provided that the Director of the New South Wales Heritage Office (the Director) is satisfied that the criteria in (a), (b) or (c) have been met and the person proposing to undertake the excavation or disturbance of land has received a notice advising that the Director is satisfied:

- (a) where an archaeological assessment has been prepared in accordance with Guidelines published by the Heritage Council of New South Wales which indicates that there is little likelihood of there being any relics in the land or that any relics in the land are unlikely to have State or local heritage significance;
- (b) where the excavation or disturbance of land will have a minor impact on the archaeological resource;
- (c) where the excavation or disturbance of land involves only the removal of fill, which has been deposited on the land.

A person proposing to excavate or disturb land in the manner described in paragraph 1 must write to the Director and describe the proposed excavation or disturbance of land and set out why it satisfies the criteria set out in paragraph 1. If the Director is satisfied that the proposed development meets the criteria set out in paragraph (a), (b) or (c) the Director shall notify the applicant.’

It is noted that some items on the site such as the Mine Managers and Jetty Masters houses would come under the category of “relics” requiring a permit under section 140. Other items date from c1964 and are therefore not “relics” as they are not 50 years old (until 2014).

## 6 REFERENCES

EJE Architecture. 2004. *Conservation Management Plan Wallarah & Moonee Collieries, Catherine Hill Bay, NSW*. Report prepared by EJE Architecture on behalf of Rosecorp.



## Figures



## Plates