



Wedgerock Pty Ltd

ABN: 15 099 038 123

Karuah South Quarry
Historical Heritage
Assessment

Prepared by

Biosis Pty Ltd

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Historical Heritage Assessment

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COMMONLY USED ACRONYMS

CBD	Central Business District
CHL	Commonwealth Heritage List
DEE	Department of the Environment and Energy
DP	Deposited Plan
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
GLDCP	Great Lakes Development Control Plan 2014
HHA	Historical Heritage Assessment
LEP	Local Environmental Plan
m	Metre
mm	Millimetre
NHL	National Heritage List
NSW	New South Wales
SEARs	Secretary's Environmental Assessment Requirements
State and Regional Development SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SoHI	Statement of Heritage Impact
SHR	State Heritage Register
Study Area	The area of impact for the proposed Project defined as the southern section of Lot 11 DP 1024564, beyond the area of disturbance associated with the Karuah Quarry

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EXECUTIVE SUMMARY

Biosis Pty Ltd was commissioned by RW Corkery & Co. Pty Ltd on behalf of Wedgerock Pty Ltd (the Applicant) to undertake a historical heritage assessment (HHA) and statement of heritage impact (SoHI) of an area of land proposed for a hard rock quarry, located on the southern part of Lot 11 DP 1024564, Karuah, New South Wales (NSW) (the Study Area). The Study Area is located in bushland approximately 4 kilometres northeast of Karuah and approximately 40 kilometres north of the Newcastle central business district (CBD).

The proposed development involves the extraction and processing of rhyodacitic ignimbrite, a hard rock resource. The proposed Project comprises the construction, use and ongoing maintenance of an extraction area, internal haul roads, a mobile processing plant, a workshop, weighbridge, office, staff amenities and other associated infrastructure. The proposed development will be assessed against Part 4 (Division 4.7) of the *Environmental Planning and Assessment Act 1979* NSW (EP&A Act).

The historical research undertaken for this report indicates that the Study Area has been largely used for limited agricultural purposes, with no formal structures identified on Crown plans or plans contained within Certificates of Title. This assessment has identified that there may be heritage items present within the Study Area related to the historical use of the land, such as fencing post holes or footings for paddock or stockyard fencing and informal farm outbuildings, and historical timber felling and land clearing. However, these heritage items if present have been assessed as not holding heritage significance. The impacts to the Study Area for the proposed hard rock quarry are considered acceptable, as there are no items of heritage significance within the Study Area that will be impacted by these activities, provided that the following recommendations are implemented.

Recommendations

These recommendations have been formulated to. They are guided by the International Council of Monuments ICOMOS *Burra Charter* with the aim of doing as much as necessary to care for the place and make it useable and to retain its cultural significance.¹

Recommendation 1: No further assessment required

This assessment fulfils the requirements for a HHA outlined in the Secretary's Environmental Assessment Requirements (SEARs).

- Should the development proceed, Biosis recommends mitigation measures be implemented, as outlined in Recommendation 2 below.

Recommendation 2: Development of an unexpected finds procedure

Relics are historical archaeological resources of local or State significance and are protected in NSW under the *Heritage Act 1977*. Important historic relics cannot be disturbed except with a permit or exception/exemption notification. Should unanticipated important relics be discovered during the course of the proposed Project, work in the vicinity must cease and an archaeologist contacted to make a preliminary assessment.

¹ Australia ICOMOS 2013

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1. INTRODUCTION

1.1 PROJECT BACKGROUND

Biosis Pty Ltd was commissioned by RW Corkery & Co. Pty Ltd on behalf of Wedgerock Pty Ltd (the Applicant) to undertake a HHA of the proposed Karuah South Quarry, a hard rock quarry located at 61 Blue Rock Close, Karuah, NSW, comprising the southern part of Lot 11 DP 1024564 (**Figure 1** and **Figure 2**), referred to as the 'Study Area' herein. The Project involves the extraction and processing of hard rock resources and is classified as a State Significant Development under Schedule 1 of the State and Regional Development SEPP. This historic heritage assessment report has been prepared to support an *Environmental Impact Statement* to address the relevant requirements documented in the Secretary's Environmental Assessment Requirements (SEARs) for the proposed Project. The proposed development will also be assessed in accordance with Part 4 (Division 4.7) of the EP&A Act.

1.2 LOCATION OF THE STUDY AREA

The Study Area is located approximately 4 kilometres northeast of the town of Karuah and approximately 40 kilometres north of the Newcastle CBD (**Figure 1**). It encompasses approximately 18 hectares of private land adjacent to the Pacific Highway. The land is currently zoned RU2 – Rural Landscape.

The Study Area is within the:

- Mid-Coast Local Government Area (LGA);
- Parish of Gloucester; and
- County of Tarean.

Figure 2 shows the Study Area is located immediately south of the Karuah Quarry and southwest of Karuah East Quarry, both operated by Hunter Quarries Pty Ltd. It is bounded in the south by the Pacific Highway, in the east by Lot 12 DP 1024654 (**Figure 2**), which is owned by Hunter Quarries Pty Ltd, and to the west by Lot 21 DP 1024341.

The northern part of the Site covers the southern part of the Karuah Quarry which is fully disturbed and not required to be included in the Study Area.

1.3 THE PROPOSED PROJECT

The following principal components of the proposed Project that would be located on the Site.

- Extraction Area - Stage 1
The Stage 1 extraction area would cover approximately 4.9ha with its footprint typically between approximately 30m AHD and 75m AHD (to a floor with an elevation of approximately 8m AHD).
- Extraction Area - Stage 2
The Stage 2 extraction area would cover approximately 5.9ha with its footprint typically between 75m AHD and 120m AHD (to a sloping floor from an elevation of 8m to 12m AHD).

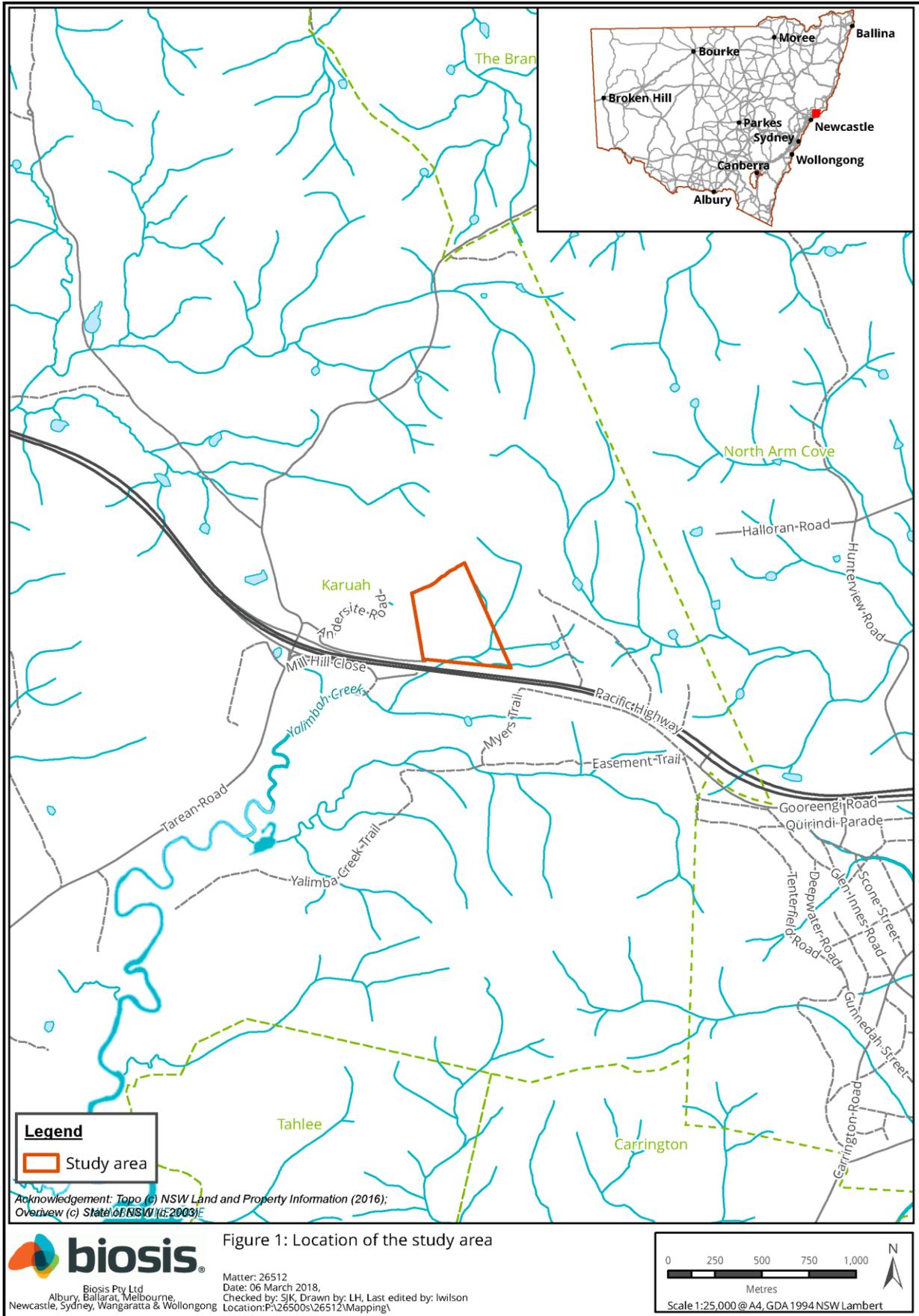


Figure 1 Location of the Study Area

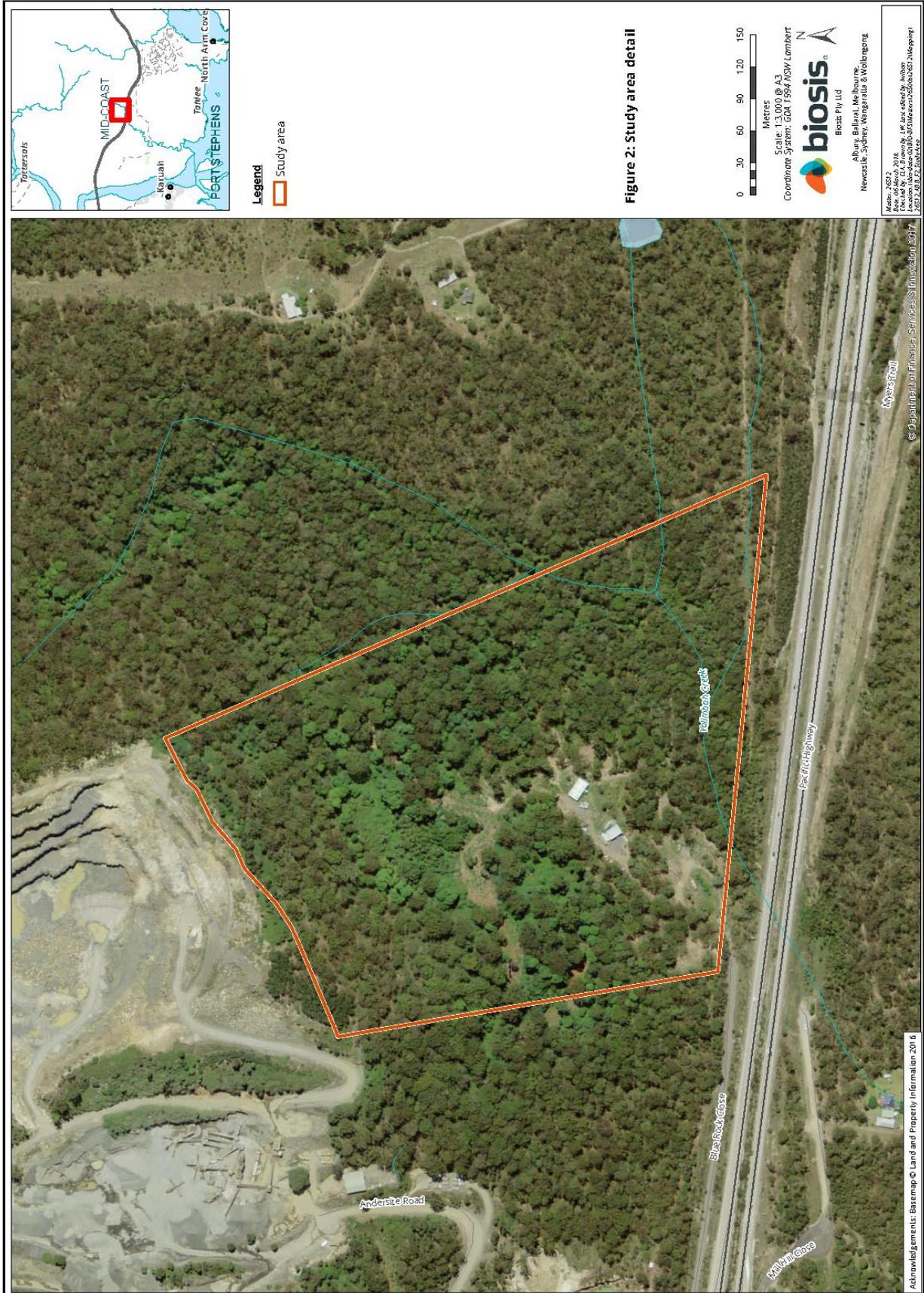


Figure 2 Study Area Detail

- **Quarry Infrastructure Area**
The Quarry infrastructure area would be located on the southern side of the extraction area and would incorporate the product stockpiling area, ancillary components area and mobile processing plant.
- **Product Stockpiling Area**
The product stockpiling area would be located on the northern section of the Quarry infrastructure area during Stage 1. This area would be expanded to cover northern, southern and western sections of the Quarry infrastructure area during Stage 2.
- **Mobile Processing Plant**
The mobile processing plant would incorporate a range of crushers and screens and would be located on the western section of the Quarry infrastructure area during Stage 1. During Stage 2, the mobile processing plant would be relocated to the eastern section of the Quarry infrastructure area to minimise product haulage distances.
- **Internal Roads**
A network of roads to provide access for off-road haul trucks between the extraction and processing area.
- **Quarry Access Road**
The inclined, sealed section of road extending from the Quarry entrance to the southern side of the Quarry infrastructure area.
- **Sediment Basins**
Two sediment basins (Western and Southern), each with a with pre-treatment pond, would be constructed to collect sediment-laden runoff from the disturbed sections of the Quarry.
- **Diversion Drains**
Two clean water diversion (CWD) drains (CWD East and CWD West) would be constructed to direct runoff from undisturbed areas upslope of the extraction area.

Quarry products would be despatched by road using the existing road network with access to the Site via a new entrance to Lot 11 DP 1024564 from Blue Rock Close. The location of the Quarry entrance would be close to the existing entrance to the property and would be constructed to accommodate quad-dog trailers and semi-trailers.

The overall footprint of the operation would be kept as small as possible during all stages of operation, with vegetation and soil removed immediately prior to the progressive extension of operations. Progressive rehabilitation would be undertaken as soon as practicable following disturbance.

1.4 SCOPE OF HISTORICAL HERITAGE ASSESSMENT

This report was prepared in accordance with current heritage guidelines including *Assessing Heritage Significance*, *Assessing Significance for Historical Archaeological Sites and 'Relics'* and the *Burra Charter*.² This report provides a heritage assessment to identify if any heritage items or relics exist within or in the vicinity of the Study Area. The heritage significance of these heritage items has been investigated and assessed in order to determine the most appropriate management strategy.

² NSW Heritage Office 2001; NSW Heritage Branch, Department of Planning 2009; Australia ICOMOS 2013

The following is a summary of the major objectives of the assessment.

- Identify and assess the heritage values associated with the Study Area. The assessment aims to achieve this objective through providing a brief summary of the principal historical influences that have contributed to creating the present – day built environment of the Study Area using resources already available and some limited new research.
- Assess the impact of the proposed Project on the cultural heritage significance of the Study Area.
- Identifying sites and features within the Study Area which are already recognised for their heritage value through statutory and non – statutory heritage listings.
- Recommend measures to avoid or mitigate any negative impacts on the heritage significance of the Study Area.

1.5 LIMITATIONS

This report is based on historical research and field inspection. It is possible that further historical research or the emergence of new historical sources may support different interpretations of the evidence in this report.

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 on the site. This is because limitations in historical documentation and archaeological methods make it difficult to accurately predict what is under the ground.

The significance assessment made in this report is a combination of both facts and interpretation of those facts in accordance with a standard set of assessment criteria. It is possible that another professional may interpret the historical facts and physical evidence in a different way.

2. STATUTORY FRAMEWORK

This assessment will support an *Environmental Impact Statement* and address the relevant requirements of the SEARs issued under Part 4 (Division 4.7) of the EP&A Act. In NSW, cultural heritage is managed in a three-tiered system: national, state and local. Certain sites and items may require management under all three systems or only under one or two. The following discussion aims to outline the various levels of protection and approvals required to make changes to cultural heritage in NSW.

2.1 ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is the national Act protecting the natural and cultural environment. The EPBC Act is administered by the Department of the Environment. The EPBC Act establishes two heritage lists for the management of the natural and cultural environment.

- The National Heritage List (NHL) contains items listed that have been assessed to be of outstanding significance and define 'critical moments in our development as a nation'.³
- The Commonwealth Heritage List (CHL) contains items listed on the CHL that are either natural and cultural heritage places that are on Commonwealth land, in Commonwealth waters or are owned or managed by the Commonwealth. A place or item on the CHL has been assessed as possessing 'significant' heritage value.⁴

A search of the NHL and CHL did not yield any results associated with the Study Area.

2.2 NSW HERITAGE ACT 1977

Heritage in NSW is principally protected by the *Heritage Act 1977* (as amended) which was passed for the purpose of conserving items of environmental heritage of NSW. Environmental heritage is broadly defined under Section 4 of the *Heritage Act 1977* as consisting of the following items: 'those places, buildings, works, relics, moveable objects, and precincts, of State or Local heritage significance'. The Act is administered by the NSW Heritage Council, under delegation by the Heritage Division, Office of Environment and Heritage. *The Heritage Act 1977* is designed to protect both known heritage items (such as standing structures) and items that may not be immediately obvious (such as potential archaeological remains or 'relics'). Different parts of the *Heritage Act 1977* deal with different situations and types of heritage and the Act provides a number of mechanisms by which items and places of heritage significance may be protected.

2.2.1 State Heritage Register

Protection of items of State significance is by nomination and listing on the State Heritage Register (SHR) created under Part 3A of the *Heritage Act 1977*. The Register came into effect on 2 April 1999. The Register was established under the *Heritage Amendment Act 1998*. It replaces the earlier system of Permanent Conservation Orders as a means for protecting items with State significance.

A permit under Section 60 of the *Heritage Act 1977* is required for works on a site listed on the SHR, except for that work which complies with the conditions for exemptions to the requirement for obtaining a permit. Details of which minor works are exempted from the requirements to

³ 'About National Heritage' <http://www.environment.gov.au/heritage/about/national/index.html>

⁴ 'Commonwealth Heritage List Criteria'

<http://www.environment.gov.au/heritage/about/commonwealth/criteria.html>

submit a Section 60 Application can be found in the Guideline 'Standard Exemptions for Works requiring Heritage Council Approval'. These exemptions came into force on 5 September 2008 and replace all previous exemptions.

There are no items or conservation areas listed on the SHR within the Study Area.

2.2.2 Archaeological Relics

Section 139 of the *Heritage Act 1977* protects archaeological 'relics' from being 'exposed, moved, damaged or destroyed' by the disturbance or excavation of land. This protection extends to the situation where a person has 'reasonable cause to suspect' that archaeological remains may be affected by the disturbance or excavation of the land. This section applies to all land in NSW that is not included on the SHR.

Amendments to the *Heritage Act 1977* made in 2009 changed the definition of an archaeological 'relic' under the Act. A 'relic' is defined by the *Heritage Act 1977* as:

'Any deposit, object or material evidence:

- a) which relates to the settlement of the area that comprises NSW, not being Aboriginal settlement
- b) which is of State or Local significance.'

It should be noted that not all remains that would be considered archaeological are relics under the *Heritage Act 1977*. Advice given in the Archaeological Significance Assessment Guidelines is that a 'relic' would be viewed as a chattel and it is stated that

'In practice, an important historical archaeological site will be likely to contain a range of different elements as vestiges and remnants of the past. Such sites will include 'relics' of significance in the form of deposits, artefacts, objects and usually also other material evidence from demolished buildings, works or former structures which provide evidence of prior occupations but may not be 'relics'.⁵

If a relic, including shipwrecks in NSW waters (that is rivers, harbours, lakes and enclosed bays) is located, the discoverer is required to notify the NSW Heritage Council. Section 139 of the *Heritage Act 1977* requires any person who knows or has reasonable cause to suspect that their proposed works will expose or disturb a 'relic' to first obtain an Excavation Permit from the Heritage Council of NSW (pursuant to Section 140 of the Act), unless there is an applicable exception (pursuant to Section 139(4)). Excavation permits are issued by the Heritage Council of NSW in accordance with sections 60 or 140 of the *Heritage Act 1977*. It is an offence to disturb or excavate land to discover, expose or move a relic without obtaining a permit. Excavation permits are usually issued subject to a range of conditions. These conditions will relate to matters such as reporting requirements and artefact cataloguing, storage and curation.

Exceptions under Section 139(4) to the standard Section 140 process exist for applications that meet the appropriate criterion. An application is still required to be made. The Section 139(4) permit is an exception from the requirement to obtain a Section 140 permit and reflects the nature of the impact and the significance of the relics or potential relics being impacted upon. If an

⁵ NSW Heritage Branch, Department of Planning 2009, 7

exception has been granted and, during the course of the development, substantial intact archaeological relics of state or local significance, not identified in the archaeological assessment or statement required by this exception, are unexpectedly discovered during excavation, work must cease in the affected area and the Heritage Office must be notified in writing in accordance with section 146 of the *Heritage Act 1977*. Depending on the nature of the discovery, additional assessment and, possibly, an excavation permit may be required prior to the recommencement of excavation in the affected area.

2.2.3 Section 170 Heritage and Conservation Registers

Section 170 of the *Heritage Act* requires that culturally significant items or places managed or owned by Government agencies are listed on departmental Heritage and Conservation Register. Information on these registers has been prepared in accordance with Heritage Division guidelines. Statutory obligations for archaeological sites that are listed on a Section 170 Register include notification to the Heritage Council in addition to relic's provision obligations. There are no items within or adjacent to the Study Area that are entered on a State government instrumentality Section 170 Register.

2.3 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

2.3.1 Local Environmental Plan

The Great Lakes Local Environmental Plan (LEP) 2014 contains schedules of heritage items that are managed by the controls in the instrument. As the proposed Project is being undertaken under Part 4 (Division 4.7) of the EP&A Act, DPE is responsible for approving controlled work via the development application system for State Significant projects.

No heritage items or conservation areas of local significance were identified on the Great Lakes LEP in or within the vicinity of the Study Area.

2.3.2 The Great Lakes Development Control Plan 2014

The Great Lakes Development Control Plan 2014 (GLDCP) outlines built form controls to guide development. The GLDCP supplements the provisions of the Great Lakes LEP.

The controls within the GLDCP require that a Heritage Impact Statement be prepared for any proposed development:

- within a Heritage Conservation Area;
- affecting a heritage item; and
- for a property in the vicinity of a heritage item (by reference two lots in any direction).

A Heritage Impact Statement must address the following items so as to enable it to fully consider the impact of the development upon the significance of the building, relic or structure.

- Address the controls within the Development Control Plan relating to heritage conservation.

- Document the history of the place and why it is significant.
- Include aspects of the proposal that will enhance or diminish the significance of the place.
- Provide alternative approaches that were considered but discounted and the reasons why.
- Include recommendations as to how the proposal could be amended to be more sympathetic and/or minimise its impact on the heritage significance of the place.

Demolition of any building identified as a Heritage Item or as being within a Heritage Conservation Area will not be permitted unless:

- the item is structurally unsound past the point of repair and represents a public danger; or
- there is a concurrent Development Consent for a replacement structure.

3. HISTORICAL CONTEXT

Historical research has been undertaken to identify the land use history of the Study Area, to isolate key phases in its history and to identify the location of any built heritage or archaeological resources which may be associated with the Study Area. The purpose of this section is to present a brief historical summary to inform the historic heritage assessment based upon historical research into the land use history of the Study Area.

3.1 TOPOGRAPHY AND RESOURCES

The Study Area is located within the southern portion of the New England Fold belt within two geological units; the Karuah Formation and the Nerong Volcanics. The Karuah Formation comprises the greater portion of the Study Area, and is a depositional unit, consisting of polymytic conglomerate and lithic arenite, boulder conglomerate, pebbly sandstone and mudstone, and a schlieren of heavy minerals⁶.

The Nerong Volcanics formation is situated within the southern portion of the Study Area. It consists of carboniferous siliceous flows of rhyolitic and dacitic ignimbrites, with occasional interbeds of tuffaceous sandstone and conglomerate⁷. The formation extends across the wider local area, and originates from a volcanic ignimbrite eruption in the Carboniferous Period (approximately 359-299 Ma)⁸. The geology described above suggests the potential for Aboriginal cultural heritage materials such as stone tools manufactured from ignimbrites and rhyolite raw material resources to be present within the Study Area.

⁶ Matthei 1995

⁷ RW Corkery 2017

⁸ Geological Survey of NSW 2014

3.2 ABORIGINAL PAST

Aboriginal people have occupied the Hunter Valley for at least 20,000 years according to Koetigg⁹. Karuah located within lands traditionally inhabited by the Worimi people. Worimi territory extended from north of the Hunter River to Forster near Cape Hawke, along the coastline, encompassing Port Stephens and stretching inland close to Gresford, and as far south as Maitland¹⁰.

The Worimi were considered to be hunter-gatherers and Sokoloffnov¹¹ argues that the territories of the Worimi were established to include a variety of habitats rich in raw materials and food resources. Trade, intermarriage, and the sharing of ceremonial places were central to the Worimi nation's interaction with neighbouring tribal groups, such as the Awabakal, Kamilaroi, Gringai, Wanaruah, and other tribes of the region.

Little is known about the size of the population of the Worimi tribe within Port Stephens before white settlement, however it is agreed that numbers declined rapidly after contact¹². Sources from the early 1800s to the 1840s vary in their estimates, from 120 at a single campsite¹³, to 500 Worimi individuals within the Port Stephens Area in 1837. Threkeld even reports that by 1839, the population of the Awabakal People around the Lake Macquarie area, to the south of Worimi territory had declined to as low as 20¹⁴. Exposure to diseases brought by white settlers, the destruction of food resources, and instances of hostile relations between white settlers/Europeans and the Worimi people would have contributed significantly to this decline.

The earliest account of contact between Europeans and the Worimi is recorded by David Collins. It was reported that five convicts who had escaped from Parramatta in 1790 were shipwrecked at Port Stephens. The convicts lived among the Worimi for 5 years until they were recaptured¹⁵. Following this, a small garrison of soldiers was established in the 1820s at a place now known as Soldiers Point to aid in the recapture of convicts who had escaped from Port Macquarie.

According to Bramble, relations between escaped convicts and local tribes were good natured, and signified the introduction of products of European civilisation. Colonel Paterson upon exploring the Hunter region in 1801 commented upon the possible use of European axes by Aboriginal tribes, and perhaps convicts who lived among them, to cut down trees¹⁶. This introduction to European resources would have led to the establishment of more fruitful relations between the Aboriginal people of the Hunter region and European penal authorities, in aiding in the recapture of escaped convicts.

Hostile relations between Europeans and the Worimi tribes of Port Stephens seemed to have originated from early interactions with timber-getters exploiting good quality cedar along the coastal regions of NSW. Accounts of hostilities between timber-getters and the Aboriginal people in the region are recorded from as early as 1804. Dawson, having arrived in Newcastle in 1825

⁹ Koetigg 1987

¹⁰ Tindale 1974

¹¹ Sokoloffnov 1977

¹² Dean-Jones 1990

¹³ Ebsworth 1826

¹⁴ Dean-Jones 1990

¹⁵ Bramble 1981

¹⁶ Bramble 1981

after free-settlement was made available in the Hunter region in 1820, comments upon the hostile relations which existed between European timber-getters and the Worimi Tribe of Port Stephens. This consequently set a precursor to relations between Europeans or white settlers and local tribes within the Port Stephens Area:

'The timber-cutting parties... were the first people who came in contact with the natives in the neighbourhood of the sea; and as they were composed of convicts and other people not remarkable either for humanity or honesty, the communication was not at all to the advantage of the poor natives, or subsequently to the settlers who succeeded those parties. The consequence of the behaviour of the cedar getters was, that the natives inflicted vengeance upon almost every white man they came in contact with, and as convicts were frequently running away from the penal settlement of Port Macquarie to Port Stephens ...numbers of them were intercepted by the natives and sometimes detained whilst those who fell into their hands and escaped with life, were uniformly stripped of their clothes'¹⁷.

The non-Indigenous cultural heritage of this area is defined mostly by the Hunter Region's economic development in terms of pastoral, agriculture and mining industries. In 1804 a penal settlement had been established in Newcastle, and its primary source of industry was coal production. Natural coal deposits of the Newcastle and Tomago were exploited, disturbing Worimi and Awabakal territories.

3.3 HISTORICAL DEVELOPMENT

The following brief discussion situates the Study Area within a history of the broader Port Stephens and Karuah area, following European exploration and settlement of NSW from the late 18th Century onwards.

3.3.1 Exploration (1770 to 1815)

The first instance of European contact with Port Stephens took place in 1770, when Captain James Cook and the *Endeavour* passed the harbour on 11 May, naming it for Sir Phillip Stephens, Secretary to the Admiralty¹⁸. Around two years after the arrival of the First Fleet in 1788, a group of escaped convicts are believed to have entered the region, including William and Mary Bryant; it is understood that they discovered coal near Newcastle¹⁹.

The convict ship *Salamander* entered Port Stephens harbour in late 1791, of which a sketch was made of some of its waterways²⁰. In February 1795, Surveyor-General Charles Grimes visited Port Stephens on the orders of Lieutenant-Governor Paterson; Grimes reported that the land was low and sandy, and did not recommend further visits²¹. In August, the HMAS *Providence*

¹⁷ Dawson 1831

¹⁸ *Endeavour: Captain Cook's Journal 1768-71*, cited by Great Lakes Council et al. 2007, 14

¹⁹ Currey 1966; Engel et. al 2000, 8, cited by Great Lakes Council et al. 2007, 14

²⁰ Port Stephens Council n.d.

²¹ Dowd 1966; Engel et. al 2000, 8, cited by Great Lakes Council et al. 2007, 14; Suters Architects 2007, 23; Port Stephens Council n.d.

took shelter in the harbour, where the captain, W.R. Broughton, encountered four surviving convicts who had escaped from Parramatta and were living with the Worimi people²². The following year, a fishing boat was driven ashore nearby²³.

Further visits were made to the Port Stephens area in the first few decades of the 19th century. In December 1811 and January 1812, Governor Lachlan Macquarie and his wife inspected Port Stephens as part of a plan to establish a settlement north of Newcastle. Macquarie noted that while the port was 'Good, safe, and capacious', the land was not inviting to settlement and farming. As a result, no government settlement was made.²⁴ John Oxley and a team including Surgeon John Morris and Surveyor Evans surveyed the coastline from Port Macquarie to Newcastle as part of his 1818 expedition to western and northern NSW²⁵. By 1823, a successful cedar getting industry had developed within the region, but the area became over-exploited and resources dwindled within several years²⁶. However, once the Australian Agricultural Company were offered a land grant at Port Stephens in 1825, the area began to be more fully explored²⁷.

3.3.2 Port Stephens and the Australian Agricultural Company (1825 to 1848)

The Australian Agricultural Company had been established in 1824 as part of a collective whose purpose was to improve waste lands for agriculture and farming, but mainly for the production of wool. The Macarthur family initially held most of the committee positions, who advised the company directors on local conditions and matters within the colony. Surveyor-General John Oxley was consulted on the most appropriate location for a land grant; after rejecting the Liverpool Plains and head of the Hastings River, the Company settled on Port Stephens. Robert Dawson, who was recruited by the company for his experience in managing English estates, arrived at Retreat Farm in June 1825 with two ships holding 690 ewes, 30 rams, 12 head of cattle, five mares and two stallions, as well as 40 children, 25 men and 14 women, then left the group to explore the Karuah River. The current area of Carrington was selected by Dawson as an appropriate location for a settlement with higher ground and deeper water; by February the following year the settlement had been established there with settlers and stock starting to arrive from Sydney.

Although there is no record of any structures or developments within the current Study Area during this period, Dawson did order the establishment of several farms in the Port Stephens area. The 'No.1 Farm' was established on a flat above a salt water swamp on Yalimbah Creek, approximately 800 metres south west of the Study Area in 1826, with the intention of running sheep and establishing crops. Dawson explains his choice of the location in this way:

As soon as the various matters which engage my attention admitted of it, I made short excursions daily into the country into the Settlement for the purpose of ascertaining the nature of the country and quality of the sheep walks which I previously knew existed, but to what extent in the immediate vicinity of the port, I had not been able accurately to ascertain. Between this harbour and a branch of the Karuer called by the Natives Kundaine, about 8 miles in extent, as well as on the

²² Port Stephens Council n.d.

²³ Clive Lucas, Stapleton & Partners Pty Ltd 2013, 24

²⁴ Port Stephens Council n.d.

²⁵ Clive Lucas, Stapleton & Partners Pty Ltd 2013, 24; Great Lakes Council et al. 2007, 14; Port Stephens Council n.d.

²⁶ Engel et. al 2000, 10, cited by Great Lakes Council et al. 2007, 14

²⁷ Great Lakes Council et al. 2007, 14

banks of the river, the hills in general are moderately elevated, lightly timbered, and grassy, forming in my opinion excellent sheep walks, and for the most part accessible without the necessity of felling much timber. At the foot of these ranges, sheep stations may be easily formed with communications, by water in most cases, either from the river or by creeks. There are occasional scrubby and unprofitable hills, but they bear a small proportion to those above described²⁸.

Dawson also viewed the location as favourable as it was near to a military guard whose help he intended to seek if there was a need to keep the ready supply of often unruly convict labour under control. By April 1827, four men were permanently employed at the No.1 Farm, mainly engaged to create 'hurdles' or temporary enclosures where sheep would be enclosed at night. A larger number of convict labourers were also rotated in work groups through the property, with up to 40 persons working on the Farm at any one time, however, records suggest that as many as 80 people were employed in activities spanning clearing, fencing, sawing, road making, stockmen, wood splitting and preparation, along with constables and 'floggers' to oversee the convict labourers²⁹. Although there are no records of any permanent structures on the No.1 Farm, a number of 'bark huts' are recorded as being built.

In late 1827 James Bowman, Henry Dangar and Peter Cunningham provided positive feedback on the area. However, James Macarthur did not report favourably following his visit to Carrington from December 1827 to January 1828, noting that the coarse coastal pasture was unsuitable for grazing sheep. As a result, Dawson was suspended and replaced by Sir Edward Parry, who undertook a proper inspection of the land that had been granted to the Company with the Company's stock superintendent, Charles Hall. They concluded that the grant was unsuitable for sheep grazing, and the harbour, which had been a benefit of obtaining the land, had not been utilised, while ocean-vessels could not access Carrington due to the insufficient water depth.

By 1828, 23 pastoral stations had been established in Port Stephens, all connected by roadways, with multiple farms and gardens to provide food for a population of almost 600. In 1833, half of the Port Stephens grant was exchanged for land on the Peel River and at Warrah. While the agricultural endeavours of the Company failed at Port Stephens, settlers were encouraged to settle on the Port Stephens Estate³⁰. **Plate 1** shows the Company's grant in 1828 with the current Study Area's approximate location.

In 1847, the Australian Agricultural Company received a formal Crown Land grant comprising 464,640 acres (approximately 1800 square kilometres) stretching from Newcastle north to the Manning River. The grant included the current Study Area and was entered into the Registrar of Grants early in 1848³¹.

3.3.3 Ownership and Land Use (1848 to present)

Land title records indicate that the Australian Agricultural Company owned the Study Area from 1848 to 1910 as part of the private Company Parish of Carrington. During this time, the Parish was subdivided into portions, with the current Study Area comprising a part of Portion 22 (**Figure 3**), with an area of 304 acres (approximately 123 hectares)³². There are no records of any structures or agricultural use of the land during this period.

²⁸ Australian Agricultural Company Despatches to London, Volume 78/1/1 Paragraph 10

²⁹ Benson 2012, 10-12

³⁰ Turner et al. 1980, 10-20

³¹ NSW Land Registry Services, Register of Land Grants and Leases, Serial number 197, pp.359-365

³² NSW Land Registry Services, Carrington Parish Map, 1962

In 1910, the Company sold all of Portion 22 (refer **Figure 3**) to John Oscar Johnson, an employee of the NSW Government residing at nearby Sawyers Point, for the sum of 174 pounds and seven shillings.³³ John Oscar Johnson (1855-1919) was employed as a ferryman, rowing people across the Karuah River at the current location of the Karuah River Bridge until around 1914, when a hand-winch punt was installed. The crossing took 15 to 20 minutes in fine weather. Johnson operated the punt until 1918³⁴.

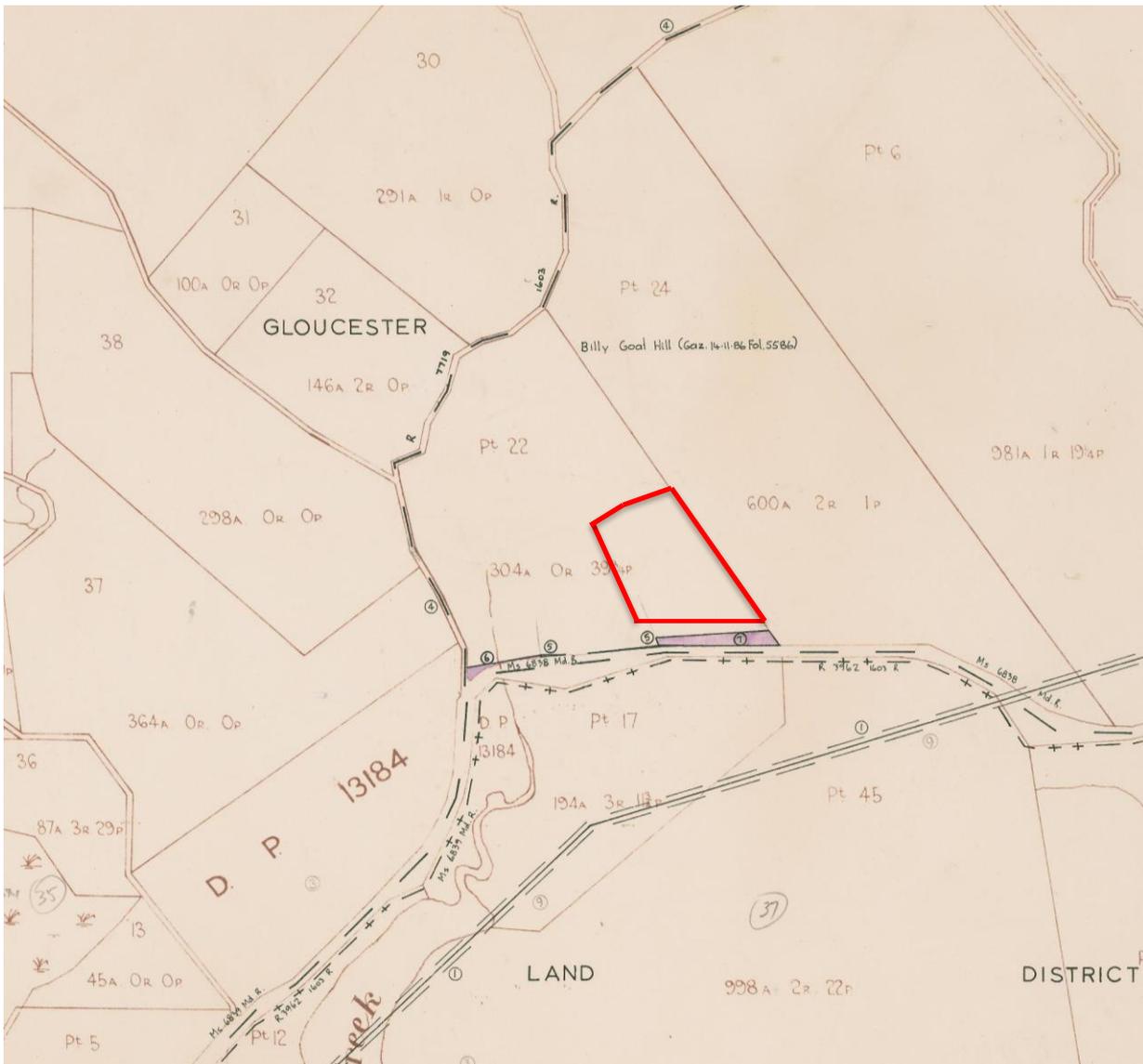


Figure 3 Plan of Portion 22, Parish of Carrington, County of Gloucester with the Study Area's approximate boundaries outlined in red (Source: NSW Land Registry Services)

³³ NSW Land Registry Services, Book 1110 No.292

³⁴ Waymarking.com, Crossing the Karuah – Karuah, NSW, Australia,

<http://www.waymarking.com/waymarks/WMXFVA> Crossing The Karuah Karuah NSW Australia, accessed 21/5/2018



Plate 1 An 1828 plan of the Australian Agricultural Company's grant at Port Stephens; the approximate location of the Study Area is indicated by the red arrow (Source: State Library of NSW)

An Australian Army ordinance survey map dated 1911 shows details of infrastructure, buildings and roads within the Port Stephens area. The survey map show two iron humpies directly west and south-west of the boundaries of Portion 22, however no buildings were recorded within the Study Area. A telephone wire and associated poles appear to be the only structures within the Study Area at this time. The survey map records the terrain as 'steep rocky ridges' with a small area of 'poor grassland' in the south (**Figure 4**).

John Oscar Johnson's son, John William Johnson, sold Portion 22 to Allan George Johnson and Albert John Johnson for the sum of 900 pounds on 27 September 1955. John William Johnson's occupation is recorded on the title as '*formerly Teamster but now Retired Timber Worker*', whilst both Allan George Johnson and Albert John Johnson are recorded as being '*Timber Contractors*'³⁵. Albert John Johnson operated a number of sawmills in the Karuah area, and previous investigations of the area suggest that Portion 22 was never clear felled, but rather, selectively logged³⁶. A sawmilling company bearing Albert Johnson's name still operates in Karuah today³⁷.

A 1962 Main Roads Survey Plan for the Pacific Highway indicates that a small area on the southern part of Portion 22 was resumed in 1961 as 'Lot 10' by the then NSW Department of Main Roads for 'road purposes'. The survey plan records that two structures, a 'WB Sawmill' and 'WB Shack' (WB indicating 'weatherboard') located on Lot 10³⁸. These structures are assumed to have been destroyed by subsequent road building activities. The Johnsons sold Portion 22 in 1975, where after it was subdivided into three lots, the current Study Area comprising Lot 221, DP 573153. The current Study Area was purchased by John Edward Anthony White and Coleen Joy White in early 1977 and then sold to John Reinard Pacey later the same year³⁹. M. Kiely purchased Lot 11 DP 1024564 in 1988.

A historic aerial photograph from 1993 shows (**Figure 5**) that the Study Area appears to have been fenced along the eastern boundary, and a small clearing made where the current shed structures are located. Some areas of selective logging appear to have taken place on the steeper slopes above the cleared area. An open cut Quarry is visible to the west of the Study Area, whilst the Pacific Highway is again located to the south. There are currently two metal sheds within the Study Area, built after 1993, both having no historical significance. In 2005, Hunter Quarries established a hard rock Quarry on the northern part of Lot 21 DP 1024564, as well as on sections of Lot 21 DP 1024564, adjoining to the west⁴⁰. With the exception of the construction of several rural sheds and logging trails, and the hard rock quarrying operations directly to the north (but outside of the current Study Area) no other developments have occurred within the Study Area.

³⁵ NSW Land Registry Services, Book 2357 No.574.

³⁶ Graham A Brown & Associates 2012, 58

³⁷ Raymondterrace.com.au, Albert Johnson Pty Ltd, <http://www.raymondterrace.com.au/listing/timber-traders-retailers/albert-johnson-pty-ltd/514360/>, accessed 21/5/2018

³⁸ NSW Land Registry Services, Crown Plan 6838.3070

³⁹ NSW Land Registry Services, Cancelled Title Volume 12737 Folio 131

⁴⁰ R.W Corkery 2017

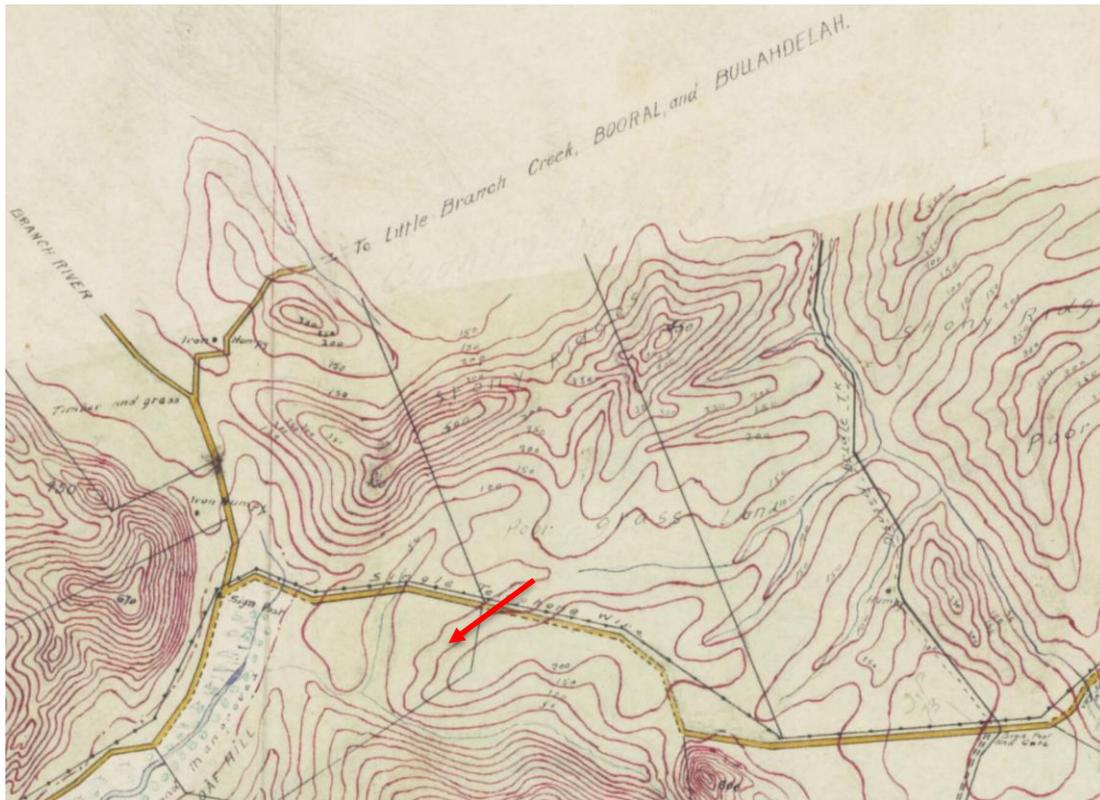


Figure 4 1911 Australian Army Ordnance Survey map, showing location of the Study Area (Source: National Library of Australia, Trove)



Figure 5 1993 aerial photograph showing approximate location of Study Area (Source: NSW LPI 2018)

3.4 CHRONOLOGY OF THE STUDY AREA

Based upon the historical research presented it is possible to summarise the chronology of the Study Area, this is presented in **Table 1**.

Table 1
Chronological Development of the Study Area

Date	Historical event or development
1770	Captain James Cook and the <i>Endeavour</i> passed the harbour on 11 May, naming it for Sir Phillip Stephens, Secretary to the Admiralty
1795	Surveyor-General Charles Grimes visited Port Stephens on the orders of Lieutenant-Governor Paterson; Grimes reported that the land was low and sandy, and did not recommend further visits.
1825	The Australian Agricultural Company take up a large grant at Port Stephens.
1847	A formal Crown Land Grant is made to the Australian Agricultural Company including the Study Area
1910	John Oscar Johnson purchases Portion 22 of Carrington Parish from the Australian Agricultural Company
1955	John William Johnson (son of John Oscar Johnson) sells Portion 22 to Albert John Johnson and Allan George Johnson, who establish a sawmill on the southern portion of the land
1961	A small section in the southern part of Portion 22 is resumed by the Department of Main Roads as part of the Pacific Highway road reserve. This part of the lot included the sawmill and weatherboard shack
1975	Portion 22 is subdivided into three lots. The Study Area becomes part of Lot 221 DP 573153
1977	John Edward Anthony White and Coleen Joy White purchase Lot 221 in May 1977
1988	M. Kiely purchased Lot 11 DP 1024564
2005	Hunter Quarries established a hard rock Quarry on the northern part of Lot 11 DP 1024564

3.5 RESEARCH THEMES

Contextual analysis is undertaken to place the history of a particular site within relevant historical contexts in order to gauge how typical or unique the history of a particular site actually is. This is usually ascertained by gaining an understanding of the history of a site in relation to the broad historical themes characterising Australia at the time. Such themes have been established by the Australian Heritage Commission and the NSW Heritage Office and are outlined in synoptic form in NSW Historical Themes⁴¹.

There are 38 State Historical Themes, which have been developed for NSW, as well as nine National Historical Themes. These broader themes are usually referred to when developing sub-themes for a local area to ensure they complement the overall thematic framework for the broader region.

⁴¹ NSW Heritage Council 2001

A review of the contextual history in conjunction with the local historical thematic history if applicable has identified two historical themes relating to the occupational history of the Study Area. This is summarised in **Table 2**.

Table 2
Identified Historical Themes for the Study Area

Australian theme	NSW theme	Local theme
Developing local, regional and national economies	Agriculture	Rural settlements
	Forestry	Timber getting, sawmilling

4. PHYSICAL INSPECTION

A physical inspection of the Study Area was undertaken on 17 May 2018 in conjunction with the Aboriginal cultural heritage survey, attended by Biosis archaeologist, Taryn Gooley in the company of Ron Tisdell and Colleen Perry, Aboriginal Sites Officers, Karuah Local Aboriginal Land Council. The principal aims of the survey were to identify heritage values associated with the Study Area; this included any heritage items (Heritage items can be buildings, structures, places, relics or other works of historical, aesthetic, social, technical/research or natural heritage significance. 'Places' include conservation areas, sites, precincts, gardens, landscapes and areas of archaeological potential).

4.1 SITE SETTING

The Study Area is located within a steep, bushland landscape, and consists of the southern part of Lot 11 DP 1024564. The Study Area is bounded by Lot 12 DP 1024564 on its eastern side, Lot 21 DP1024341 on its western side and Lot 16 DP 1024564 on its southern side. The dual carriageway Pacific Highway immediately adjoins Lot 16 1024564 to the south. The majority of the Study Area consists of dense eucalypt woodland and undergrowth, with some evidence of the area having been heavily logged in the past (**Plate 2** and **Plate 4**). There are several sheds and rural structures on the southern part of the lot (**Plate 3**).

4.2 BUILT FABRIC ASSESSMENT

Few structures or elements of the built environment were present. Two modern rural sheds were located in the southern part of the Study Area, along with several dump areas containing discarded materials and items. Associated with these were driveways and old logging trails leading uphill onto the steeper portions of the lot.



Plate 2 Typical view of the Study Area



Plate 3 Current sheds within the Study Area

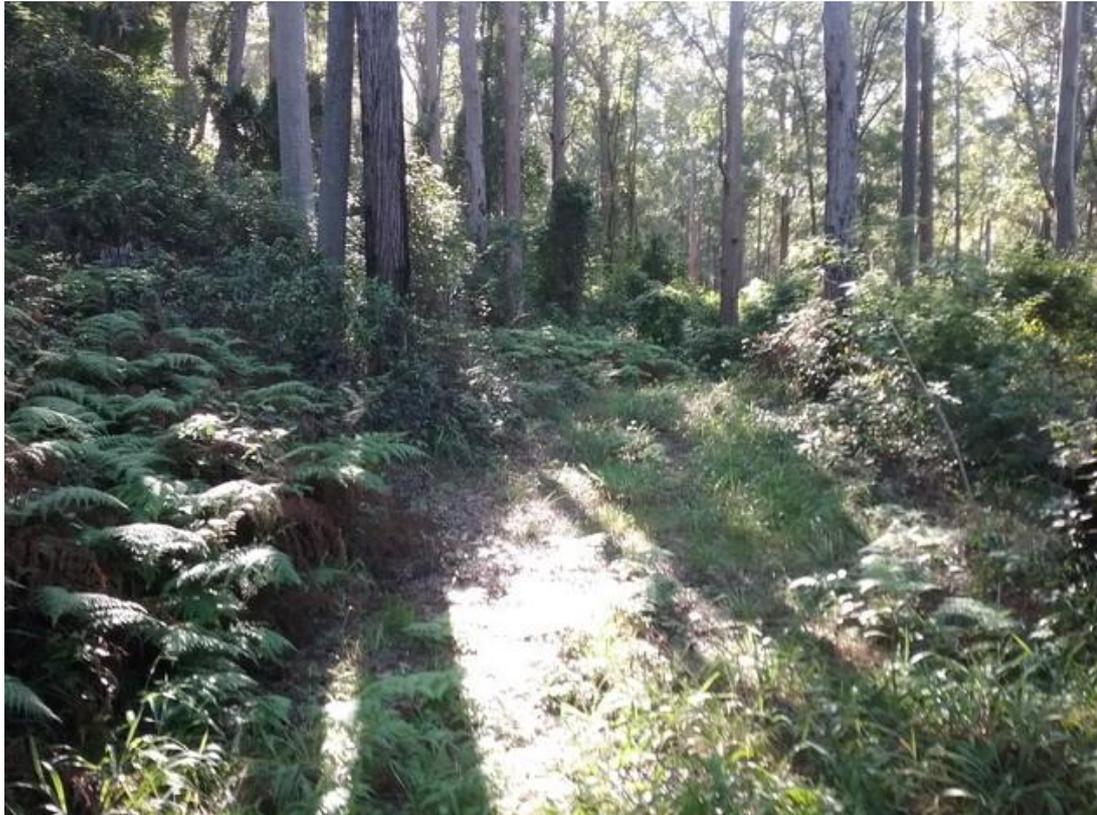


Plate 4 View of the Study Area showing dense vegetation

4.3 ARCHAEOLOGICAL ASSESSMENT

The potential archaeological resource relates to the predicted level of preservation of archaeological resources within the Study Area. Archaeological potential is influenced by the geographical and topographical location, the level of development, subsequent impacts, levels of on-site fill and the factors influencing preservation such as soil type. An assessment of archaeological potential has been derived from the historical analysis undertaken during the preparation of this report.

4.3.1 Archaeological Resource

This section discusses the archaeological resource within the Study Area. The purpose of the analysis is to outline what archaeological deposits or structures are likely to be present within the Study Area and how these relate to the history of land use associated with the Study Area.

The historical context presented in this report indicates that the Study Area has been largely used for agricultural or pastoral purposes, in particular, logging and cedar-getting, with no formal structures identified on Crown plans or plans contained within Certificates of Title. There could potentially be archaeological resources related to this land use, such as postholes or footings for stock fencing and informal farm outbuildings and timber-getters' camps.

4.3.2 Integrity of Sub-Surface Deposits

There is evidence of both historical and more recent timber felling throughout the Study Area, which may have disturbed subsurface deposits in these areas. Intensive logging, including the construction of logging trails, along with existing driveways, gravelled areas and sheds would also have impacted the integrity of any sub-surface archaeological remains.

4.3.3 Research Potential

Archaeological research potential refers to the ability of archaeological evidence to provide information about a site that could not be derived from any other source and which contributes to the archaeological significance of that site. Archaeological research potential differs from archaeological potential in that the presence of an archaeological resource (i.e. archaeological potential) does not mean that it can provide any additional information that increases our understanding of a site or the past (i.e. archaeological research potential).

The research potential of a site is also affected by the integrity of the archaeological resource within a Study Area. If a site is disturbed, then vital contextual information that links material evidence to a stratigraphic sequence may be missing and it may be impossible to relate material evidence to activities on a site. This is generally held to reduce the ability of an archaeological site to answer research questions.

Assessment of the research potential of a site also relates to the level of existing documentation of a site and of the nature of the research done so far (the research framework), to produce a 'knowledge' pool to which research into archaeological remains can add.

Developing local, regional and national economies - Agriculture and Pastoralism - Country estates and rural settlement

The Study Area has been likely utilised for both agricultural and forestry purposes since the land was granted to the Australian Agricultural Company in 1847. However, while there may be both disturbed and undisturbed archaeological material associated with these activities within the Study Area, it is unlikely that any remains would provide further information regarding timber getting, agriculture, pastoralism, country estates or rural settlement that cannot be ascertained from historical documentation.

4.3.4 Summary of Archaeological Potential

Through an analysis of the above factors a number of assumptions have been made relating to the archaeological potential of the Study Area, these are presented in **Table 3**.

The assessment of archaeological potential has been divided into three categories.

- **High archaeological potential** – based upon the historical context and documentary evidence presented within this report there is a high degree of certainty that archaeologically significant remains relating to this period, theme or event will occur within the Study Area.

- **Moderate archaeological potential** – based upon the historical context and documentary evidence presented within this assessment it is probable that archaeological significant remains relating to this period, theme or event could be present within the Study Area,
- **Low archaeological potential** – based upon the historical context and documentary evidence presented within this assessment it is unlikely that archaeological significant remains relating to this period, theme or event will occur within the Study Area.

Table 3
Assessment of Archaeological Potential

Description	Probable feature(s)	Possible construction date	Archaeological potential
Logging camps, logging trails, stockyard fencing, informal farm outbuildings	Postholes and associated cuts, remains of fencing posts, wiring. Remnants of campsites	Mid-19 th century	Low

5. SIGNIFICANCE ASSESSMENT

5.1 ASSESSMENT CRITERIA

An assessment of heritage significance encompasses a range of heritage criteria and values. The heritage values of a site or place are broadly defined as the ‘aesthetic, historic, scientific or social values for past, present or future generations’⁴². This means a place can have different levels of heritage value and significance to different groups of people.

The archaeological significance of a site is commonly assessed in terms of historical and scientific values, particularly by what a site can tell us about past lifestyles and people. There is an accepted procedure for determining the level of significance of an archaeological site. A detailed set of criteria for assessing the State’s cultural heritage was published by the (then) NSW Heritage Office. These criteria are divided into two categories: nature of significance, and comparative significance.

Heritage assessment criteria in NSW fall broadly within the four significance values outlined in the Burra Charter. The Burra Charter has been adopted by State and Commonwealth heritage agencies as the recognised document for guiding best practice for heritage practitioners in Australia.

The four significance values are:

- historical significance (evolution and association);
- aesthetic significance (scenic/architectural qualities and creative accomplishment);

⁴² NSW Heritage Office, 2001

- scientific significance (archaeological, industrial, educational, research potential and scientific significance values); and
- social significance (contemporary community esteem).

The NSW Heritage Office issued a more detailed set of assessment criteria to provide consistency with heritage agencies in other States and to avoid ambiguity and misinterpretation. These criteria are based on the Burra Charter. The following SHR criteria were gazetted following amendments to the *Heritage Act 1977* that came into effect in April 1999.

- 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 area).
- Criterion (c) - an item is important in demonstrating the 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.

5.2 LEVELS OF HERITAGE SIGNIFICANCE

Items, places, buildings, works, relics, movable objects or precincts can be of either local or State heritage significance, or have both local and State heritage significance. Places can have different values to different people or groups.

Local heritage items

Local heritage items are those of significance to the local government area. In other words, they contribute to the individuality and streetscape, townscape, landscape or natural character of an area and are irreplaceable parts of its environmental heritage. They may have greater value to members of the local community, who regularly engage with these places and/or consider them

to be an important part of their day-to-day life and their identity. Collectively, such items reflect the socio-economic and natural history of a local area. Items of local heritage significance form an integral part of the State's environmental heritage.

State heritage items

State heritage items, places, buildings, works, relics, movable objects or precincts of State heritage significance include those items of special interest in the State context. They form an irreplaceable part of the environmental heritage of NSW and must have some connection or association with the State in its widest sense.

The following evaluation attempts to identify the cultural significance of the Study Area. This significance is based on the assumption that the site contains intact or partially intact archaeological deposits.

5.3 STATEMENT OF SIGNIFICANCE

Table 4 presents an evaluation and subsequent statements of significance for the possible archaeological material within the Study Area.

6. STATEMENT OF HERITAGE IMPACT

This SoHI has been prepared to address impacts resulting from the proposed redevelopment of the Study Area. The proposed Project comprises an application for development consent under Part 4 (Division 4.7) of the EP&A Act to develop and operate the Karuah South Quarry, a hard rock Quarry on the southern part of Lot 11 1024564, Karuah, NSW. The proposed development is classified as a State Significant Development under Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011* (State and Regional Development SEPP).

This assessment has identified that there may be archaeological material present within the Study Area related to the historical use of the land for agricultural purposes, such as paddock and stockyard fencing, informal farm outbuildings and remnant logging camps and logging trails. However, these archaeological materials if present have been assessed as not holding heritage significance. The impacts to the Study Area for the proposed Project are considered acceptable, as there are no items of heritage significance within the Study Area that will be impacted by these activities, provided that an unexpected finds policy is implemented to identify and record any archaeological material that may be encountered during the proposed construction and operations.

Table 4
Evaluation and statement of Significance for Possible Historic Heritage Items
within the Study Area

Item	Significance assessment criteria*							Level of significance	Statement of significance
	A	B	C	D	E	F	G		
Logging camps, logging trails, stockyard fencing, informal farm outbuildings								Nil	<p>The possible <u>archaeological</u> material associated with the historical pastoral and agricultural activities within the Study Area, such as postholes or building footings, remains of fence posts and wiring, are not considered an important component of the cultural history of NSW or the Port Stephens district, and they are not associated with the life or works of a person(s) of importance in local or state cultural history. These possible materials will not yield information that will contribute to a greater understanding of the cultural history of NSW or the Port Stephens district, and they unlikely to demonstrate aesthetic characteristics or a high degree of creative or technical achievement in the state or local area. They do not hold a strong or special association with a community or cultural group for social, cultural or spiritual reasons in NSW or the Port Stephens district. The possible archaeological materials are not considered to possess uncommon, rare or endangered aspects of NSW or the Port Stephens district's cultural history, nor do they demonstrate the principal characteristics of a class of cultural places or environments within the state or local area.</p> <p>The possible archaeological materials associated with the historical pastoral and agricultural activities within the Study Area do not hold heritage significance.</p>

* Provide a note recording the location of these criteria

7. CONCLUSIONS AND RECOMMENDATIONS

These recommendations have been formulated to ensure the Applicant, Wedgerock Pty Ltd, is aware of its obligations with respect to historic heritage items on the Site. They are guided by the ICOMOS *Burra Charter* with the aim of doing as much as necessary to care for the place and make it useable and as little as possible to retain its cultural significance⁴³.

Recommendation 1 No further assessment required for rezoning

This assessment fulfils the requirements for a HHA outlined in the Project SEARs. Should the proposed Project proceed, it is recommended that the mitigation measures be implemented, as outlined in Recommendation 2 below.

Recommendation 2 Development of an unexpected finds procedure

Relics are historical archaeological resources of local or State significance and are protected in NSW under the *Heritage Act 1977*. Relics cannot be disturbed except with a permit or exception/exemption notification. Should unanticipated relics be discovered during the course of the proposed Project, work in the vicinity must cease and an archaeologist contacted to make a preliminary assessment of the find. The Heritage Council will require notification if the find is assessed as a relic.

⁴³ Australia ICOMOS 2013

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Annexures

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Annexure 1	Coverage of Environmental Assessment Requirements Relating to Aboriginal and Historic Heritage
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Annexure 1

Coverage of Environmental Assessment Requirements Relating to Aboriginal and Historic Heritage

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Table A1
Coverage of Secretary's Environmental Assessment Requirements Relating to
Aboriginal and Historic Heritage

Page 1 of 2

Agency / Organisation	Relevant Requirement	Relevant Section(s)
HERITAGE		
Department of Planning and Environment 02/8/18	<ul style="list-style-type: none"> an assessment of the potential impacts on Aboriginal heritage (cultural and archaeological), including evidence of appropriate consultation with relevant Aboriginal communities/parties and documentation of the views of these stakeholders regarding the likely impact of the development on their cultural heritage; and 	Aboriginal Cultural Heritage Assessment (ACHAR)
	<ul style="list-style-type: none"> identification of historic heritage in the vicinity of the development and an assessment of the likelihood and significance of impacts on heritage items, having regard to the relevant policies and guidelines listed in Attachment 1; 	Historic Heritage Assessment (HHA)
ABORIGINAL CULTURAL HERITAGE		
Office of Environment & Heritage 22/5/18	<ul style="list-style-type: none"> The Environmental Impact Assessment (EIS) must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in the Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values should be guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW. 2011) and consultation with OEH regional branch officers. 	ACHAR, Archaeological Report
	<ul style="list-style-type: none"> Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR. 	ACHAR Section 4
	<ul style="list-style-type: none"> Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH. 	ACHAR Section 5 and Section 6
HISTORIC HERITAGE		
Office of Environment & Heritage 22/5/18	<ul style="list-style-type: none"> The EIS must provide a heritage assessment including but not limited to an assessment of impacts to State and local heritage including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall: 	Historic Heritage Assessment (HHA) Section 5 Section 6
	<ul style="list-style-type: none"> a) outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996), 	HHA Section 6 Section 7

Table A1
Coverage of Environmental Assessment Requirements Relating to
Aboriginal and Historic Heritage

Page 2 of 2

Agency / Organisation	Relevant Requirement	Relevant Section(s)
HISTORIC HERITAGE (Cont'd)		
Office of Environment & Heritage 22/5/18 (Cont'd)	b) be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria),	HHA Section 1
	c) include a statement of heritage impact for all heritage items (including significance assessment),	HHA Section 6
	d) consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant), and	HHA Section 6
	e) where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.	N/A No heritage values were identified
Department of Planning and Environment 02/8/18	Environmental Planning Instruments, Policies, Guidelines & Plans	
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)	ACHAR Section 1.2 HHA Section 2
	Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH)	ACHAR Section 1.2
	Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (OEH)	HHA Section 2
	Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH)	ACHAR Section 1.2
	NSW Heritage Manual (OEH)	HHA Section 2
	Statements of Heritage Impact (OEH)	ACHAR Section 1.2