Technical Paper 10 – Aboriginal Cultural Heritage Assessment Report

Newcastle Inner City Bypass
Rankin Park to Jesmond

April 2018

NSW GOVERNMENT

THIS PAGE LEFT INTENTIONALLY BLANK

NEWCASTLE INNER CITY BYPASS
RANKIN PARK TO JESMOND, NSW

Aboriginal Cultural Heritage Assessment Report

Prepared for Roads and Maritime Services

City of Newcastle Local Government Area

January 2018

Ref. 1630

KELLEHER NIGHTINGALE CONSULTING PTY LTD
Archaeological and Heritage Management
ACN 120 187 671

Level 10, 25 Bligh St
SYDNEY NSW 2000
Phone 02 9232 5373

Document Summary

Project Name	Newcastle Inner City Bypass – Rankin Park to Jesmond: Aboriginal Cultural Heritage Assessment Report
Project Number	1630
Status	Final
Version	2.1
Client Name	Roads and Maritime Services
Recipient	Matthew Mate, Project Development Manager
Issue Date	18 January 2018
Prepared by	Dr Matthew Kelleher; Ben Anderson
Approved by	Dr Matthew Kelleher

Executive Summary

Roads and Maritime Services (Roads and Maritime) is seeking approval to construct the fifth section of the Newcastle Inner City Bypass. The project involves construction of a new 3.4 kilometre four lane divided road between Lookout Road, New Lambton Heights and Newcastle Road, Jesmond.

The project is State Significant Infrastructure (SSI 6888) and subject to approval under Part 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Department of Planning and Environment approval would be required prior to any harm to Aboriginal objects. Impacts to Aboriginal heritage have been assessed in accordance with Secretary's Environmental Assessment Requirements (SEARs). To support an application for project approval, Roads and Maritime has prepared an Environmental Impact Statement (EIS) and has also undertaken additional Aboriginal heritage assessment for the project.

Roads and Maritime engaged Kelleher Nightingale Consulting Pty Ltd (KNC) to prepare an Aboriginal Cultural Heritage Assessment Report (CHAR) for Aboriginal heritage within the project area. The CHAR has been prepared in accordance with the SEARs, Stage 3 of the Roads and Maritime *Procedure for Aboriginal Cultural Heritage Consultation and Investigation* (PACHCI) and NSW Office of Environment and Heritage (OEH) requirements and guidelines relating to the assessment of Aboriginal heritage in NSW.

Two Aboriginal archaeological sites (RP2J AFT 3 and RP2J AFT 4) and two areas of potential archaeological deposit (RP2J PAD 1 and RP2J PAD 2) were identified during the survey of the project area as part of PACHCI Stage 2 investigations. The PACHCI Stage 2 assessment recommended a program of archaeological test excavation to obtain further information in regards to the nature and significance of the Aboriginal cultural heritage resource and how it may be affected by the project.

Archaeological test excavation of the identified areas within the project boundary was subsequently undertaken in accordance with the SEARs and OEH *Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales*. The archaeological test excavation identified the presence of subsurface archaeological deposit at all four sites:

- RP2J AFT 3
- RP2J AFT 4
- RP2J IF 1 (formerly RP2J PAD 1)
- RP2J IF 2 (formerly RP2J PAD 2).

Consultation with Aboriginal stakeholders has been undertaken in accordance with the SEARs and the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.* The project area and surrounding region are known to have been important to and extensively used by past Aboriginal people. Aboriginal people's use of the region is well-documented in historic accounts, as are local groupings such as the Awabakal. Members of the contemporary Aboriginal community continue to experience connection with the area through cultural and family associations.

Aboriginal cultural significance was attributed to the impacted archaeological sites and project area as a whole. Consultation with Aboriginal stakeholders has determined that the loss of intrinsic Aboriginal cultural value of impacted sites cannot be offset; however, mitigation including the collection of surface artefacts and the safekeeping of salvaged artefacts has been recommended by the Aboriginal community.

Archaeological significance of the identified Aboriginal sites was defined by the information exhibited by each site. A mitigation program comprising surface collection and archaeological salvage, undertaken prior to construction, is required where portions of at least moderately significant Aboriginal sites would be impacted by the proposal. Mitigative salvage excavation would be required for site RP2J AFT 3, which exhibited moderate archaeological significance. The remaining three archaeological sites (RP2J AFT 4, RP2J IF 1 and RP2J IF 2) all displayed high disturbance levels and limited archaeological information; as a result, all three sites exhibited low archaeological significance with recommendation of surface collection of Aboriginal object.

Project approval is required before impacting Aboriginal objects/sites identified within the project area.

Contents

Figures

Tables

1 Introduction

1.1 Proponent and consultants

Roads and Maritime Services (Roads and Maritime) is seeking approval to construct the fifth section of the Newcastle Inner City Bypass. The project involves construction of a new 3.4 kilometre four lane divided road between Lookout Road, New Lambton Heights and Newcastle Road, Jesmond. The proposed location of the new bypass and ancillary works are shown in Figure 1 and hereafter referred to as the project area.

The project is State Significant Infrastructure (SSI 6888) and subject to approval under Part 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Department of Planning and Environment approval would be required prior to any harm to Aboriginal objects. Impacts to Aboriginal heritage will be assessed in accordance with Secretary's Environmental Assessment Requirements (SEARs). To support an application for project approval, Roads and Maritime has prepared an Environmental Impact Statement (EIS) and has also undertaken additional Aboriginal heritage assessment for the project.

Roads and Maritime engaged Kelleher Nightingale Consulting Pty Ltd (KNC) to prepare an Aboriginal Cultural Heritage Assessment Report (CHAR) for Aboriginal heritage within the project area. The CHAR has been prepared in accordance with the SEARs, Stage 3 of the Roads and Maritime *Procedure for Aboriginal Cultural Heritage Consultation and Investigation* (PACHCI) and Office of Environment and Heritage (OEH) *Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales.*

1.2 Location and scope of activity

Roads and Maritime propose to construct the fifth stage of the Newcastle Inner City Bypass. The Newcastle Inner City Bypass is part of the Roads and Maritime long term strategy to provide an orbital road within Newcastle's road network to connect the Pacific Highway at Bennetts Green with the Pacific Highway at Sandgate.

The fifth stage of this project would include the construction of 3.4 kilometres of new four lane divided road between Lookout Road, New Lambton Heights and Newcastle Road, Jesmond. The Rankin Park to Jesmond section of the Newcastle Inner City Bypass would provide traffic relief to the surrounding road to network, in particular the existing route of Lookout Road, Croudace Street and Newcastle Road.

The proposed works involve the following key elements:

- New road with two lanes in each direction, separated by a median
- Three interchanges, consisting of:
    - Northern interchange providing access to Newcastle Road and the existing Jesmond to Shortland section of the Newcastle Inner City Bypass. The full interchange provides all movements to/from the bypass and Newcastle Road
    - Hospital Interchange providing access between the John Hunter Hospital precinct and the bypass. The full interchange provides all movements to/ from the bypass
    - Southern interchange providing access to Lookout Road and the existing Kotara to Rankin Park section of the Newcastle Inner City Bypass. The bypass would travel under McCaffrey Drive. The half interchange provides connection in both directions on Lookout Road
- Structures along the road to allow for drainage, animal and bushwalker access
- Tie in and upgrades to connecting roads, including Lookout Road, McCaffrey Drive and Newcastle Road
- Large cut and fill embankments due to steep and undulating terrain
- Pedestrian and cycling facilities, including a shared path bridge over Newcastle Road
- Noise barriers and/or architectural treatment, as required
- Permanent operational water quality treatment measures.

The project area is shown in Figure 1.

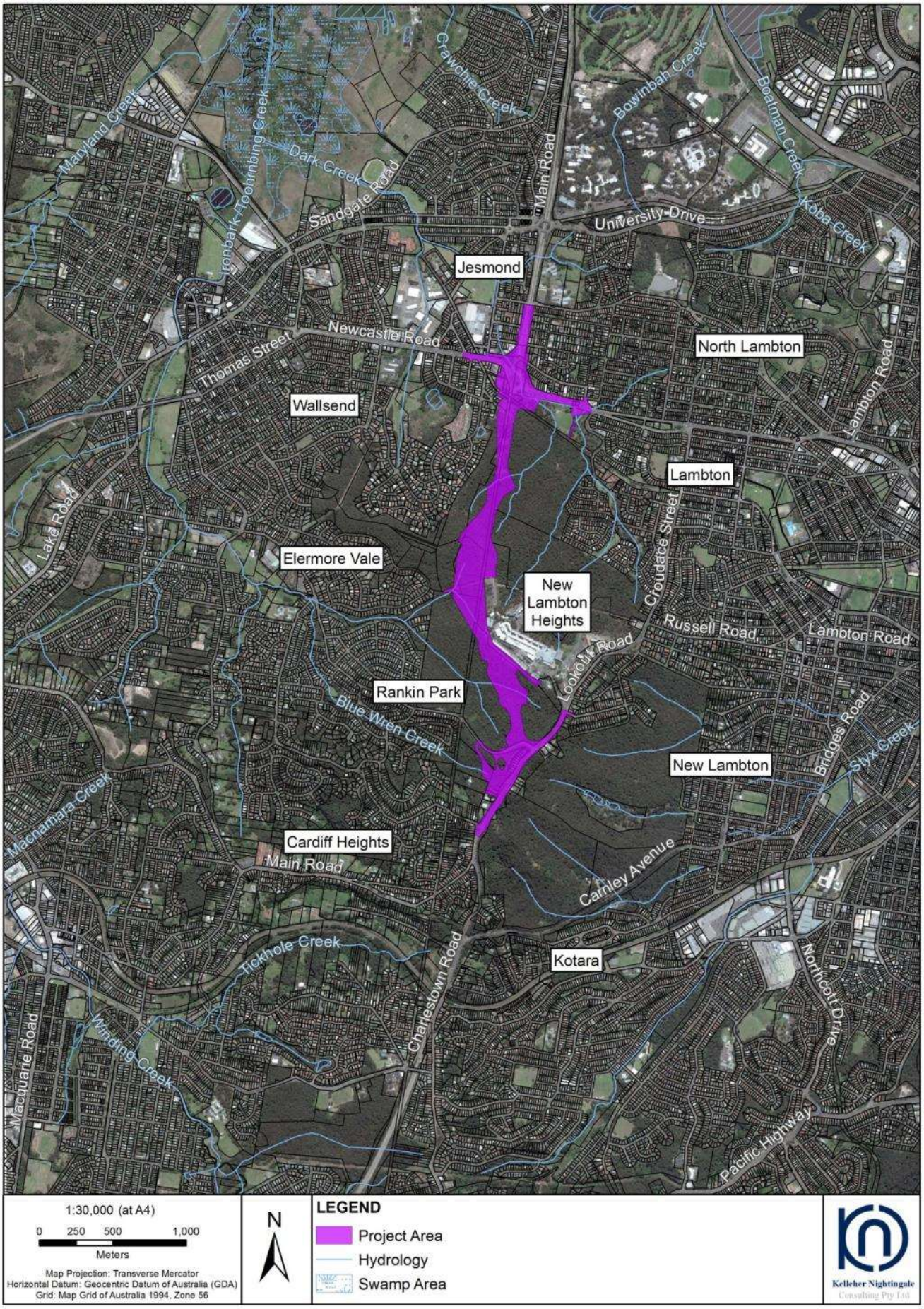


Figure 1. Project area

1.3 Project requirements

This CHAR addresses the Aboriginal heritage requirements identified in the project SEARs. The objectives of the CHAR combine Aboriginal community consultation with an archaeological investigation in accordance with:

- Secretary's environmental assessment requirements;
- Roads and Maritime PACHCI (Roads and Maritime 2011);
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (OEH 2010);
- *Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (DEC 2005)*;* and
- *Aboriginal cultural heritage consultation requirements for proponents 2010* (OEH 2010).

Aboriginal cultural heritage assessment for the project was designed to meet the SEARs. This included:

- Assessment of impacts to Aboriginal heritage (both cultural and archaeological significance);
- Consultation with Aboriginal communities, including Awabakal Local Aboriginal Land Council and registered Aboriginal stakeholders for the project, to assess impacts and develop mitigation measures;
- Preparation of and community consultation on an archaeological assessment methodology. The methodology was distributed to registered Aboriginal stakeholders for review (allowing 28 day review period) and discussed at an Aboriginal Focus Group meeting, resulting in agreement by the stakeholders;
- Evaluation of landscape features and potential archaeological significance;
- Detailed archaeological assessment of the project to fully identify spatial extent and impacts;
- Identification of mitigation and management measures;
- Distribution of draft CHAR to Aboriginal stakeholders and an Aboriginal Focus Group meeting to discuss the CHAR results and agree on appropriate mitigation measures.

Specific requirements of the SEARs are outlined in the table below.

Table 1. SEARs: Aboriginal Heritage

Secretary's Environmental Assessment Requirements	Where addressed in this document
Impacts to *Aboriginal heritage* (including cultural and archaeological significance), in particular impacts to Aboriginal objects and potential archaeological deposits (PAD), should be assessed. Where impacts are identified, the assessment shall:	Section 8
• undertake appropriate archaeological investigations generally in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010), to establish the full spatial extent and significance of any archaeological evidence across each site/area of PAD, and include the results of these excavations. If an alternative excavation method is proposed, it shall be developed in consultation with OEH.	Sections 8, 9 and 10
• be undertaken by a suitably qualified heritage consultant(s);	Section 1
• demonstrate effective consultation with Aboriginal communities in determining and assessing impacts and developing and selecting options and mitigation measures (including the final proposed measures);	Section 5 Appendices B and C
• assess and document the archaeological and cultural significance of cultural heritage values of affected sites; and	Section 7
• outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the measures) generally consistent with *the Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (DEC 2005) and other relevant guidelines and requirements.	Section 4

2 Landscape Context

2.1 Landform, geology and soils

The project area is located within the Lower Hunter Valley, a northern physiogeographic region of the Sydney Basin. The Sydney Basin is a large geological feature that stretches from Batemans Bay to Newcastle and west to Lithgow. The formation of the basin began between 300 to 250 million years ago when river deltas gradually replaced the ocean that had extended as far west as Lithgow. The oldest, Permian layers of the Sydney Basin consist of marine, alluvial and deltaic deposits that include shales and mudstone overlain by coal measures.

The topography of the project area is characterised by crest, flat, open depression and slope landforms of a prominent ridgeline which forms the watershed for the catchments of Dark Creek in the north, Ironbark Creek in the west and Styx Creek in the east (Figure 2). The northern portion of the project area is associated with low slopes descending from the crests of the central portion of the project area. The southern portion of the project area is made up of moderate to steep slopes ascending to the crest occupied by Kookaburra Circuit, McCaffrey Drive and Lookout Road.

The underlying geology of the project area is predominantly formed from subgroups of the Newcastle Coal Measures, with the northern portion of the project area containing Tomago Coal Measures (Figure 3). The northern low lying hill landforms are formed from Tomago Coal Measures (Pt) geology which consists of siltstone, sandstone, coal, tuff, claystone, conglomerate and minor clay. Waratah Sandstone (Pnw) is a subgroup of the Newcastle Coal Measures that underlies the flat landforms of the Dark Creek flood plain and is characterised by medium grained sandstone. The Lambton Subgroup (Pnl) of the Newcastle Coal Measures is present within the lower elevations of the ridgeline south of Dark Creek and is characterised by sandstone, siltstone, claystone, coal and tuffaceous sandstone. The highest elevations of the ridgeline in the southern portion of the project area are formed from the Adamstown Subgroup (Pna) of the Newcastle Coal Measures and comprise conglomerate, tuff, sandstone, siltstone, claystone and black coal.

Soil landscapes in the area are closely related to the basal geology and topography of the project area (Figure 3). The predominant soil type is the Killingworth erosional soil landscape which includes shallow to moderately deep Yellow Podzolic Soils, yellow Soloths, Gleyed Podzolic soils and gleyed Soloths on the crests and hillslopes of the project area. Structured Loams, Bleached Loams and Lithosols are also present on some crests. Cedar Hill colluvial soil landscapes are present on the steep slopes in the southern portion of the project area. These soil types include moderately deep to deep well to imperfectly drained Brown Podzolic and Yellow Podzolic soils. Structured loams which are moderately deep and well drained are also present.

Beresfield residual soils overlie Tomago Coal Measures in the northern portion of the project area. These soils occur on crests, are moderately deep and moderately well to imperfectly drained Yellow Podzolic soils, brown Podzolic soils and brown Soloths. Well drained Red Podzolic soils and red Soloths occur on upper slopes with brown Soloths and yellow Soloths occurring on side slopes. Lower slopes in this soil landscape are characterised by imperfectly to poorly drained Yellow Podzolic soils.

The majority of the project area has not been affected by contemporary land clearing and is currently covered by uncleared open forest with some open woodland. Several unsealed access tracks and utility easements have been constructed through the vegetated areas. Urban development with associated infrastructure is present in the northern and southern portions of the project area while the John Hunter Hospital precinct is located adjacent to the eastern boundary of the project area. Historically, mining activity has also resulted in land disturbance, clearing and changes to watercourses.

The spur south of the Dark Creek floodplain was also the location of the former Hollywood shanty town. The settlement developed during the Great Depression of the 1930s around a north south aligned track and was inhabited by 70 to 80 families by 1949 (Aurecon 2016: 16). The settlement is believed to have continued into the mid to late 1950s when it was cleared by the local council (Baker Archaeology 2016: 17).

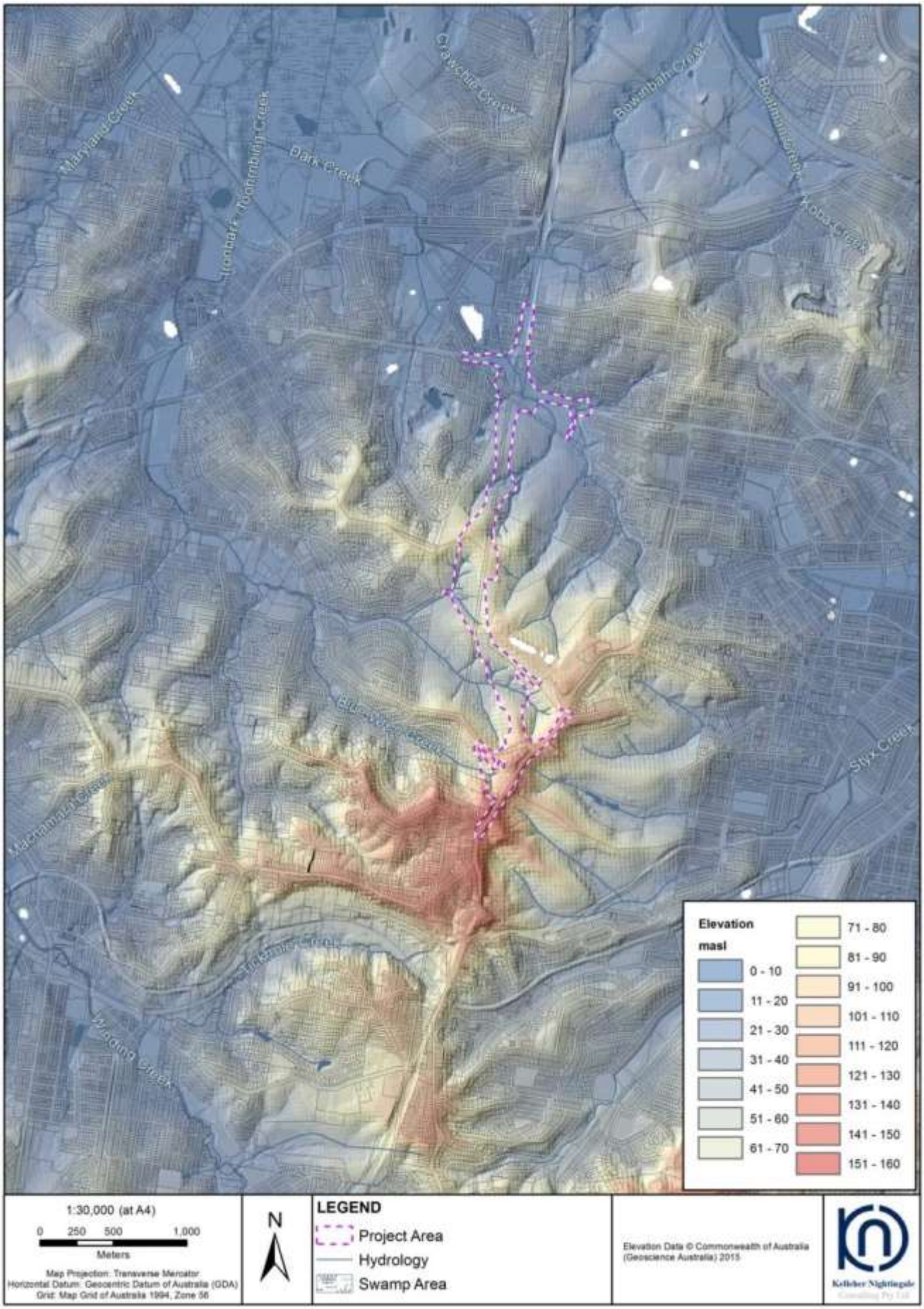


Figure 2. Topography of the project area

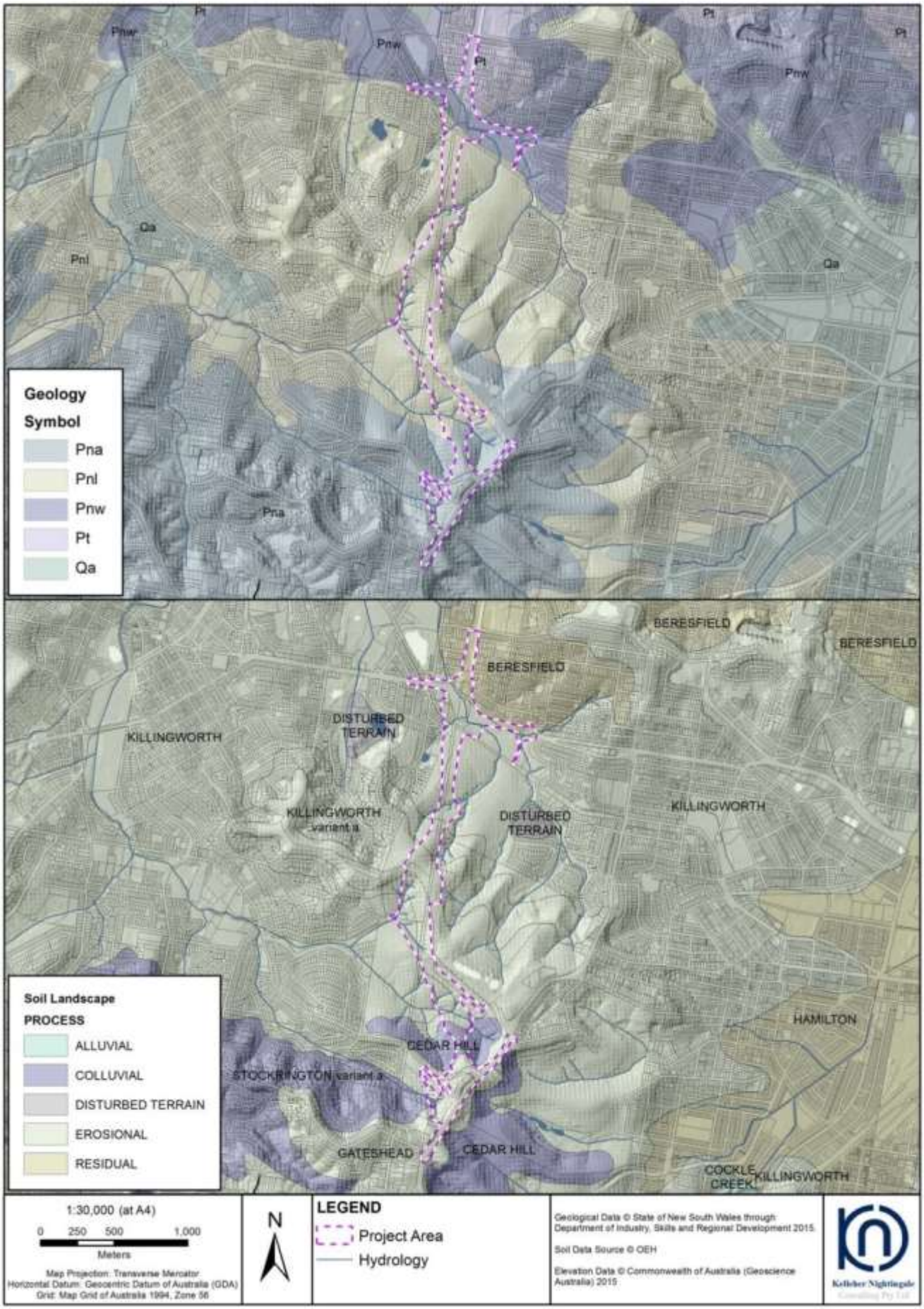


Figure 3. Geology and soil landscapes of the project area

2.2 Ethnohistoric context

Although the specific project area is not recorded directly in ethnographical accounts, historical accounts were made of the Aboriginal people living in the region at the time of initial European exploration and settlement in the late eighteenth and early nineteenth centuries. (cf. Brayshaw 1987; Maynard 2015). These historical accounts describe a landscape which was important to and intensively used by Aboriginal people. Contact with Europeans introduced diseases that drastically altered the size and structure of the Aboriginal population, whilst the establishment of a penal colony and later settlement at Newcastle subsumed the traditional areas used to meet subsistence needs and displaced the Aboriginal people inhabiting these areas.

Early historical observations described several Aboriginal groups within the region associated with particular areas of land. The project area is located within the territory of the Awabakal. The area inhabited by the Awabakal is estimated to have covered 1,800 square kilometres from Newcastle and the Hunter River in the north to Wyong in the south (Maynard 2015). Aboriginal people appear to have been organised into small groups of families or 'bands' who participated in communal subsistence gathering activities and formed part of a larger clan or descendant group that held ties to that area of Country.

James Grant, a lieutenant in the Royal Navy who visited the area in 1801-1802 on board HMS *The Lady Nelson*, observed the fires of Aboriginal people opposite Ash Island (Grant 1803: 155). J.W. Fawcett, writing on the Wonarua who inhabited the Hunter Valley west of the Awabakal, noted that the locations of camp sites were periodically reused from generation to generation and that "in choosing the site [for their camps], proximity to fresh water was one essential, some food supply a second, whilst a vantage ground in case of attack from an enemy was a third" (Fawcett 1898: 152). The shelters used by Aboriginal people were depicted in a painting of Aboriginal people camping near the mouth of the Hunter River by Joseph Lycett in the early nineteenth century (Plate 1). In the painting, the shelters can be seen as being constructed of bark sheeting while Aboriginal people are depicted gathered around fires which are situated at the entrances to the shelters.

Plate 1. Aborigines resting by camp fire, near the mouth of the Hunter River, Newcastle, New South Wales By Joseph Lycett. Image from National Library of Australia: http://nla.gov.au/nla.obj-138500420

Thomas Skottowe, while Commandant of the Newcastle penal settlement from 1811 to 1814, collected several Aboriginal items from the region which were drawn by T.R. Browne (Plate 2). The items include spears, a shield, a spear thrower, clubs, an axe with a European iron blade, a boomerang, a basket, a water-carrier, a twined dilly bag, and a fishing line with shell hook. The depicted items illustrate the use of various perishable materials including bark, wood and grasses that are rarely preserved in the archaeological record and would have constituted a large portion of the items used by past Aboriginal people.

Plate 2. Native Arms from Select Specimens From Nature of the / Birds Animals &c &c of New South Wales, Collected and Arranged by Thomas Skottowe Esqr. The Drawings By T.R. Browne. Image from the State Library of New South Wales: http://www.sl.nsw.gov.au/collection-items/native-arms-select-specimens-nature-birds-animals-c-c-new-south-wales-collected-and

Early historical sources also note that an abundant supply of fresh water and marine resources were available in the region from the Hunter River, the estuary towards the mouth of the Hunter River and the coast of the South Pacific Ocean (cf. Grant 1803). Aboriginal people were observed exploiting marine resources of the coast and Hunter River by fishing and gathering shell fish while terrestrial resources such as kangaroos, bandicoots, snakes and lizards were hunted in the hinterland areas (Grant 1803: 55; Fawcett 1898: 152; Threlkeld in Gunson 1974:54-55). Historical sources also recorded some of the uses that artefacts which are found within archaeological contexts would have had. Hatchets were constructed from hard stone which was chipped and then ground to an edge before being hafted while stone knives were documented as being used for cutting up meat and stone chips or shells used for skinning animals (Miller 1886: 353).

The Newcastle region remains important to local Aboriginal people, who have maintained their traditional ties to the area through the sharing of knowledge and lore down generations. The consultation process to date has identified a number of people who have indicated their interest in the Newcastle area, demonstrating the tangible link that members of the contemporary Aboriginal community retain to the land. Awabakal Traditional Owners Aboriginal Corporation (letter dated 30/10/2017) stated that

> Although the impact of European invasion dramatically changed Aboriginal life in Australia forever, the recent history of the Newcastle Region is also characterised by the cultural resilience of Aboriginal Peoples, for both those who have retained connection to Country and those that are reconnecting to Country. Recent history is also characterised by the movement of other Aboriginal Peoples into the Country of the Awabakal and Guringai and the development of their own more recent attachments to the area. Whilst a diversity of attachment and experience is recognised, it is also recognised that the landscape, vegetation and watercourses of the Newcastle Region form part of an Aboriginal cultural landscape of traditional and contemporary cultural and spiritual value to many Aboriginal People.
>
> Aboriginal lore requires that the Aboriginal cultural landscape (which includes Aboriginal heritage sites, landscape features of cultural value, the plants, animals and water) of the Newcastle Region is cared for so that it will survive for future generations of our Peoples.

3 Archaeological Assessment

3.1 Previous archaeological investigations

Previous archaeological investigations within the boundary and vicinity of the project area have generally taken the form of large scale Aboriginal heritage studies and smaller scale archaeological investigations for proposed infrastructure and major development projects. As part of the current project, an archaeological survey of the entire project area was undertaken as part of the PACHCI Stage 2 assessment (see Section 3). In addition, a test excavation of the sites and area of potential archaeological deposit identified during the PACHCI Stage 2 assessment within the project area was undertaken (see Section 4). A summary of the relevant investigations is presented in this section.

Newcastle Coastline
Dyall (1971) published the results of archaeological fieldwork undertaken along the Newcastle coastline and adjacent areas to the east of the current project area. The majority of Aboriginal sites identified were open camp sites comprising stone artefacts and/or shell midden while five axe-grinding groove locations were identified between Newcastle and Redhead. Open camp sites were generally found in close proximity to marine, estuarine and lagoon resources with large midden sites found where both ocean beach and tidal reef resources were available. The axe grinding groove sites were located on sandstone creek beds and included two locations (AHIMS ID 38-4-0083 and 38-4-0085) located approximately 500 metres east of the current project area. Stone artefacts were predominantly made from chert with tuff/mudstone and quartzite also identified. Dyall identified quarry sites with small boulders of good quality chert at Nobbies, Merewether and Glenrock approximately six kilometres north east of the current project area. The quarry site at Glenrock was associated with broken boulders and implements made from the lumps of chert (ibid: 159).

Newcastle LGA
An Aboriginal Heritage Study of the Newcastle Local Government Area (LGA) was undertaken by AMBS in 2005. The study aimed to synthesise and evaluate existing information about Aboriginal heritage in the LGA, integrating both physical/material expressions (archaeological sites) and intangible expressions (social and cultural values) to allow the development of a framework for the strategic conservation and management of Aboriginal cultural heritage. The heritage study included an assessment of Aboriginal archaeological sensitivity across the LGA within defined regions based on a landscape model incorporating the distribution pattern of known sites and terrain integrity. The Awaba Hills region, in which the project area is located, encompassed the undulating and low rolling hills in the southern portion of the Newcastle LGA. The spatial distribution of recorded sites within the region was characterised by low density sites along ridges and hillslopes with increased site complexity and density in proximity to coastal landforms. Smaller quantities of axe grinding grooves, quarries and ceremonial sites were also identified within the region and the study noted that sources of tuff/mudstone were present within the Glenrock Nature Reserve approximately three kilometres south east of the current project area. The archaeological sensitivity modelling determined that the lower slopes of the Glenrock Nature Reserve had moderate sensitivity while the upper slopes were assessed as having low archaeological potential (AMBS 2005; 89).

Bluegum Vista
In 2002, Umwelt (2002b) undertook an archaeological excavation for the Bluegum Vista residential estate project approximately three kilometres to the north of the project area. A total of 3001 flaked stone artefacts were recovered from 316 square metres. Fine grained siliceous tuff/mudstone and silcrete were the most dominant raw material types. Artefact types included flakes, broken flakes, retouched flakes, flaked pieces, cores, hammerstones, an anvil and a grinding stone fragment. Three areas (hillock/headland, open spur crest and sheltered spur crest) were determined to be of very high significance, with the hillock/headland and sheltered spur crest being recommended for conservation.

Glendale
Dean-Jones (1989) conducted an archaeological constraints assessment, including a field survey, of 90 hectares of land along Winding Creek at Glendale approximately 4 kilometres west of the current project area. The field survey identified nine Aboriginal archaeological sites comprising eight artefact scatters and one culturally modified tree. One artefact scatter consisted of a concentration of 53 artefacts made up of predominantly tuff/mudstone flakes, flaked pieces and cores. The remaining seven sites had less than 10 pieces of flaked stone each.

John Hunter Hospital
Brayshaw and Kerr (1983) undertook archaeological survey of the then Rankin Park Hospital adjacent to the eastern boundary of the current project area. Although the survey did not identify archaeological evidence of Aboriginal occupation, it was recommended that any further development which may impact upon creek lines involve further archaeological investigation to examine the potential for unrecorded grinding grooves.

Archaeological investigations were also undertaken by Umwelt (2002a) for a proposed new access road to John Hunter Hospital. The area was considered to be heavily disturbed by activities associated with the use of an existing service track. No Aboriginal archaeological sites or area of potential archaeological deposit was identified during the survey and the area was determined to be of low archaeological significance.

Newcastle Inner City Bypass (formerly State Highway 23)
Brayshaw and Associates (1984) undertook an archaeological survey of three potential routes for the State Highway 23 including portions of the current project area. The survey area extended from Lookout Road at New Lambton Heights to Newcastle Road at Jesmond Park. No Aboriginal archaeological sites were identified during the survey. Visibility was assessed as very low with the majority of the survey area having visibility below 5%.

ERM undertook archaeological survey of the intersection of Lookout Road and McCaffrey Drive, New Lambton within the southern boundary of the current project area. No Aboriginal archaeological sites were identified within the surveyed area. In addition, no areas of archaeological sensitivity were identified due to past land uses and associated disturbances to the landscape (ERM 2002: 18).

Umwelt (2006) conducted an Aboriginal archaeological assessment for three proposed routes for State Highway 23 including portions of the current project area. The assessment comprised background research of the environmental context and cultural context including previous archaeological investigations and an archaeological survey. The assessment noted that based on previous archaeological investigations in the region, artefact scatters (open camp sites) and axe grinding grooves were the sites types most likely to occur within the assessment. Predicative modelling determined that the assessment area would have had transient use by past Aboriginal people with low levels of artefact discard.

No Aboriginal archaeological sites or areas of potential archaeological deposit were identified within the surveyed area. Visibility and exposure were assessed as being less than 10% across all landforms within the surveyed area. The assessment noted that no sandstone outcropping occurred within the assessment area and determined that past landuse including vegetation clearance and the construction of tracks in addition to steep slopes and natural processes such as erosion had severely reduced the potential for undisturbed Aboriginal archaeological sites.

3.2 Newcastle Inner City Bypass – Rankin Park to Jesmond: Aboriginal archaeological survey report

An Aboriginal archaeological survey report (PACHCI Stage 2 survey report) was prepared to inform the Environmental Impact Statement for the project (KNC 2017). The assessment comprised an archaeological survey in addition to a desktop review of previous archaeological investigations and the environmental context. The desktop review included a search of the Aboriginal Heritage Information Management System (AHIMS) and other heritage registers and lists. The AHIMS search identified two grinding groove sites (38-4-0082 and 38-4-0085) which were located approximately 360 metres south east of the project area (within in a nearby section of Blackbutt Reserve that is disconnected from the project); however, no registered Aboriginal archaeological sites or Aboriginal places had been recorded or declared in the project area. No Aboriginal heritage items or places were listed on other heritage registers and lists within or in the vicinity of the project area.

The desktop review of previous archaeological investigations demonstrated that the region was utilised for a diverse range of activities by past Aboriginal people. Archaeological sites in the region were predominantly artefact scatters that were spatially more frequent and contained higher densities of stone artefacts in close proximity to marine, estuarine and fresh water resources. Lower density sites occurred along ridges and hillslopes. The location of grinding groove and quarry sites were determined by the local geology. Grinding grooves had been identified in the region on exposed sandstone outcrops bordering creek lines while sources of stone artefact raw material were available at Glenrock approximately three kilometres south east of the current project area.

A review of the environmental context of the project area determined that it was located within a landscape with varying levels of natural and human disturbance. The construction of roads, utilities and structures in addition to historic mining, clearance of native vegetation, landscaping and natural process such as erosion had disturbed both subsurface deposits and remove old growth trees. The desktop review determined that while aboriginal objects were unlikely to survive in situ within these contexts ground surface visibility was often increased by these processes, leading to increased identification of surface artefacts in these areas.

The survey was undertaken with representatives from the Awabakal Local Aboriginal Land Council and the Awabakal and Guringai People (former Native Title Claimants). The project area was divided for recording purposes into four survey units based on physical features that are shown on Figure 4. The survey closely inspected any areas of surface exposure for artefacts and any mature trees for evidence of Aboriginal bark removal or modification. In addition, bedrock outcropping was inspected for grinding grooves, art and occupation shelters. Surface exposure across the project area was generally low and visibility within surface exposures was high. Surface exposure frequency varied across the project area and was dependant on vegetation density, natural processes such as erosion and modern land use practices. Despite the lack of surface visibility it was still possible to assess the archaeological potential based on landform.

The survey identified four new archaeological sites (RP2J AFT 1, RP2J AFT 2, RP2J AFT 3 and RP2J AFT 4) and two potential archaeological deposits (PAD) (RP2J PAD 1 and RP2J PAD 2). Site RP2J AFT 1 was located approximately 10 metres outside the project area while site RP2J AFT 2 was located approximately 24 metres outside the project area.

Artefacts identified during the survey included stone flakes, flaked pieces and fragments. Artefacts were made from mudstone/tuff, silcrete and greywacke.

Sites RP2J AFT 1 and RP2J AFT 2 were highly disturbed artefact scatters within offsite informal tracks. The surface artefact scatter at site RP2J AFT 1 comprised one silcrete flake and two greywacke flakes that were identified on a gravel track. The surface artefact scatter at site RP2J AFT 2 comprised a tuff medial flake fragment and one silcrete flake that were identified along an eroded track. The sites exhibited low archaeological value as no subsurface deposit was present and the artefacts were found within imported gravels.

Site RP2J AFT 3 was a low density artefact scatter located on an elevated flat overlooking the junction of two unnamed north east flowing ephemeral creeks. The surface artefact scatter comprised one tuff/mudstone flake and two pieces of a tuff/mudstone flake which were identified on an informal offroad bicycle (BMX) track. The site exhibited variable levels of disturbance with low to moderate levels of disturbance from the ad hoc construction of the BMX track and associated dirt mounds, while the adjacent areas contained remnant native vegetation and little visible evidence of subsurface disturbance.

Site RP2J AFT 4 was a low density artefact scatter situated on the crest and north facing slope of a ridge spur. The surface artefact scatter comprised a single silcrete proximal flake fragment and a cluster of six artefacts comprising flakes and flake fragments of silcrete and tuff/mudstone that were identified within surface exposures on an unsealed track. The site was assessed as having low to moderate archaeological potential due to a mixture of negative factors: erosion, historic disturbance and positive factors: favourable landform, good proximity to resources and identified artefacts.

RP2J PAD 1 and RP2J PAD 2 were two areas of PAD situated on the crest of localised highpoint on a north west running ridge that forms the watershed separating the catchments of Ironbark Creek in the south and Dark Creek in the north. The two areas of PAD exhibited archaeologically favourable topography and soils combined with a relative proximity to water and known archaeological sites. The crest displayed low levels of transferential particle movement, with soils cycling (horizontally) in situ. Subsequent to the completion of the PACHCI Stage 2 report a single artefact (heat affected tuff flake) was identified on the crest of RP2J PAD 2.

Beyond the identified Aboriginal sites and PADs, the remainder of the project area displayed low archaeological potential due to combinations of archaeologically unfavourable topography, geology, erosion, ephemeral character of the first order waterways or highly modified state of the lower second order waterways, previous fluvial activity or disturbance from land use practices.

The PACHCI Stage 2 assessment recommended that if Aboriginal sites/PADs could not be avoided by the proposed works, an archaeological test excavation at these locations was required to obtain further investigation to understand the nature and significance of the Aboriginal cultural heritage resources and how this may be affected by the project.

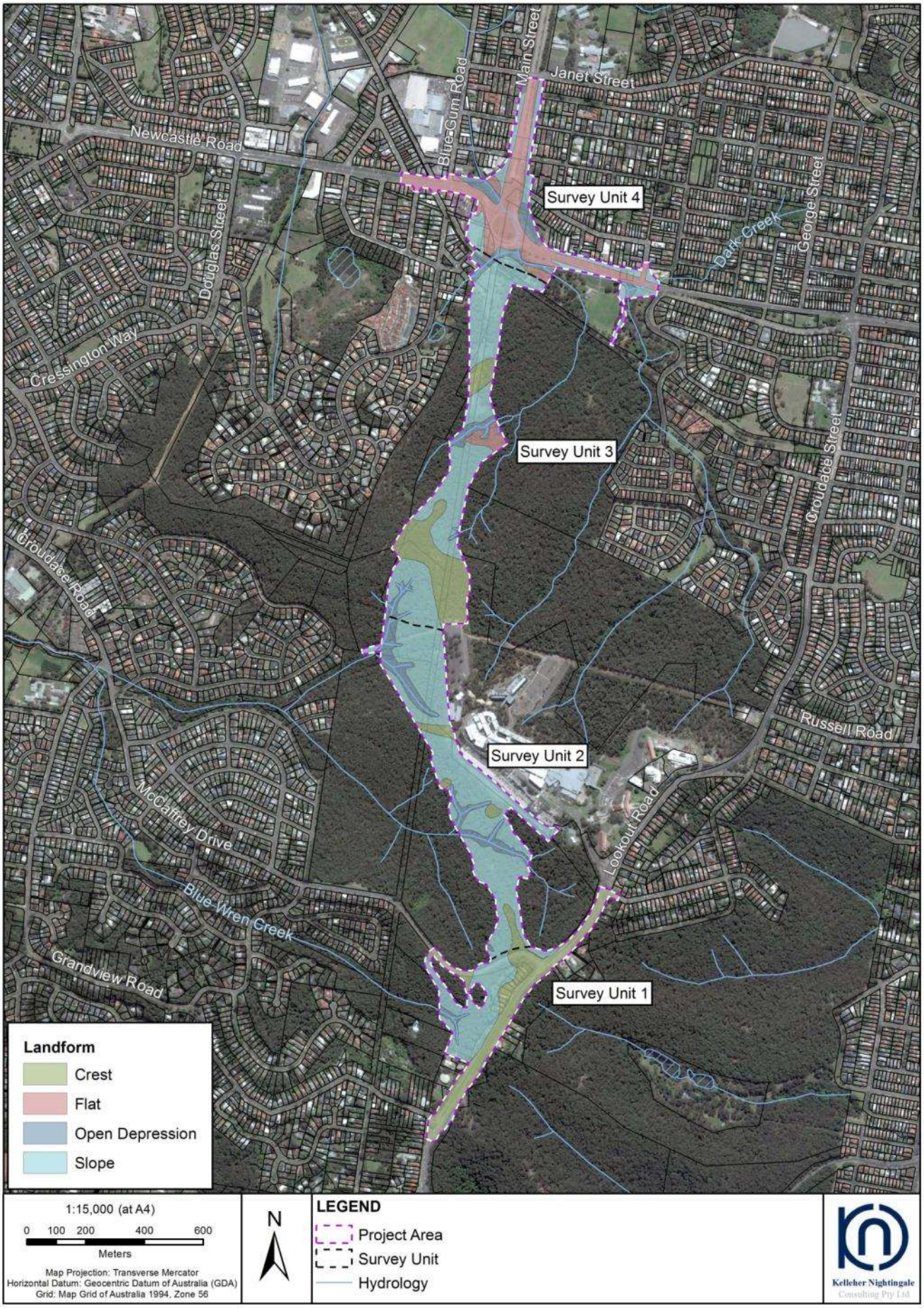


Figure 4. PACHCI Stage 2 survey units and landforms

4 Archaeological Test Excavation

Previous investigation undertaken as part of the PACHCI Stage 2 assessment identified two Aboriginal archaeological sites (RP2J AFT 3 and RP2J AFT 4) and two areas of potential archaeological deposit (RP2J PAD 1 and RP2J PAD 2) within the project area. The PACHCI Stage 2 assessment recommended a program of archaeological test excavation to obtain further information in regards to the nature and significance of the Aboriginal cultural heritage resource and how it may be affected by the project.

Archaeological test excavation was carried out by KNC and field representatives of registered Aboriginal stakeholder groups in August 2017 as recommended by the PACHCI Stage 2 assessment and in accordance with the OEH *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*.

Aims, methodology and results of the test excavation program are presented below.

4.1 Aims

The primary aim of the test program was to determine if intact archaeological deposits were present on site and to assess the nature and extent of these deposits. Test excavation focused on defining the boundary of any subsurface archaeological deposit in relation to artefact distribution and disturbance from land use practices or natural processes.

This information was sought to assist in interpreting the archaeological landscape that remains in the project area and aid management of the archaeological resource. The sampling area was restricted to ensure an adequate sample without having significant impact on the archaeological value of the identified sites.

4.2 Methodology

Field methodology was developed and carried out in accordance with the SEARs and the OEH *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*. The test excavation program was specifically designed to target questions of artefact survivability through assessing the intactness of the deposit.

The test excavation program was undertaken at sites RP2J AFT 3 and RP2J AFT 4 (Figure 5) and within the two areas previously defined as PADs (RP2J PAD 1 and RP2J PAD 2) (Figure 6). At each test excavation area, a site datum was recorded and test excavation units were placed along aligned transects. In accordance with the Code of Practice, each test excavation unit measured 50 x 50 centimetres and squares were evenly distributed to sample the extent of the area. The coordinate of the north-west corner for each excavation unit was recorded using a handheld GPS receiver in GDA94 Zone 56. The test units were then given the name 'TS' for Test Square, followed by an arbitrary unique identifying number (e.g. TS 1, TS 2, TS 3).

Following OEH guidelines, the first excavation unit was excavated in 5 centimetre spits onto a culturally sterile deposit. Based on the results of the first excavation square, subsequent squares were excavated in 10 centimetre spits until culturally sterile soils were reached. The information from each test excavation square, including a detailed deposit description and unit depths, was recorded by the excavators onto standardised excavation unit recording sheets. At the end of the excavation program, all squares were photographed and soil section profiles were drawn.

All excavation was undertaken using hand tools. All excavated material was placed in buckets and dry sieved on site using a combination of nested 5 millimetre and 2.5 millimetre wire mesh screens. Artefacts retrieved from the excavation were retained for further investigation. All test squares were backfilled with the original soil at the completion of the excavation. The excavation took place between 7 and 18 August 2017.

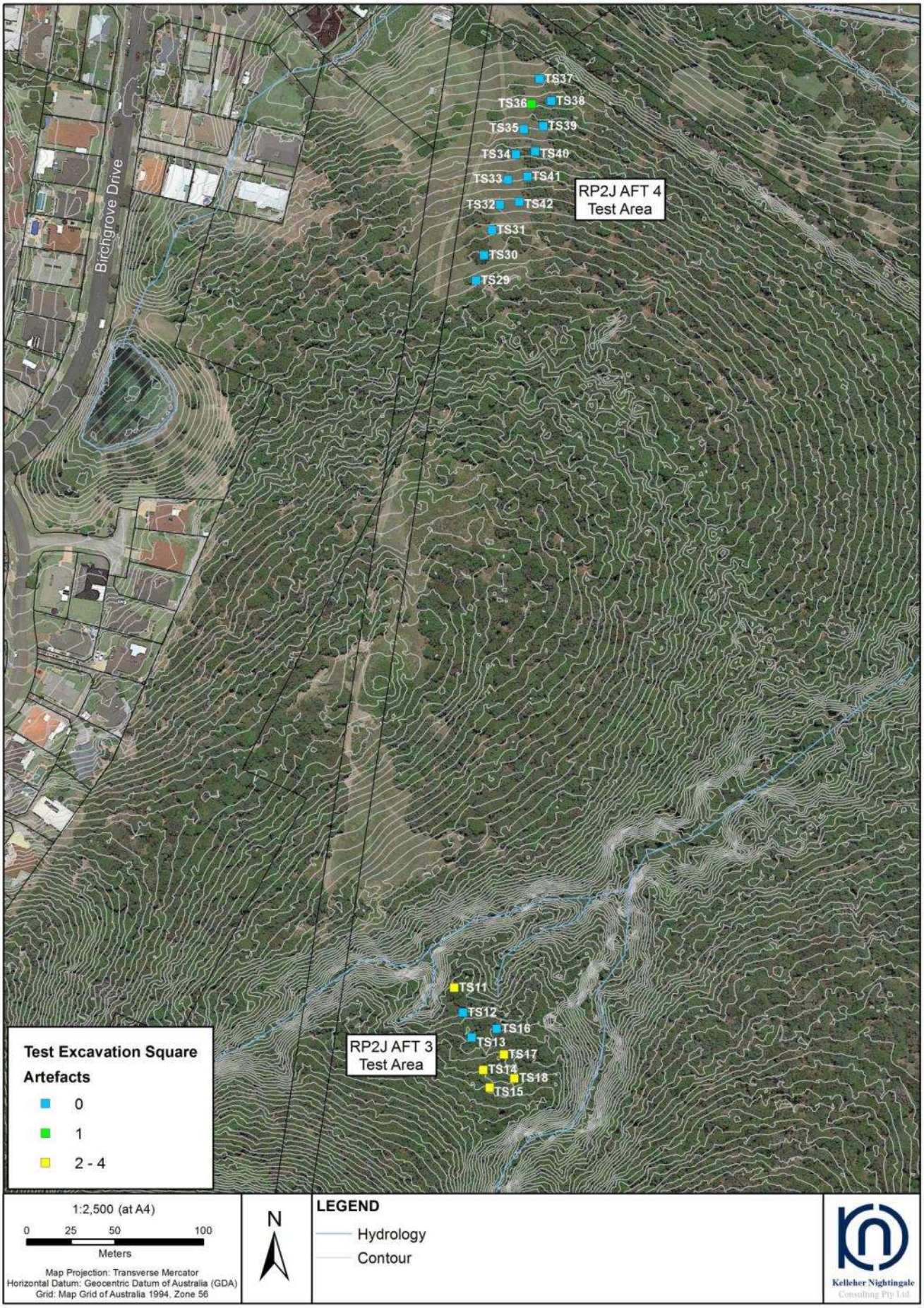


Figure 5. Archaeological test square locations and artefact density at RP2J AFT 3 and RP2J AFT 4

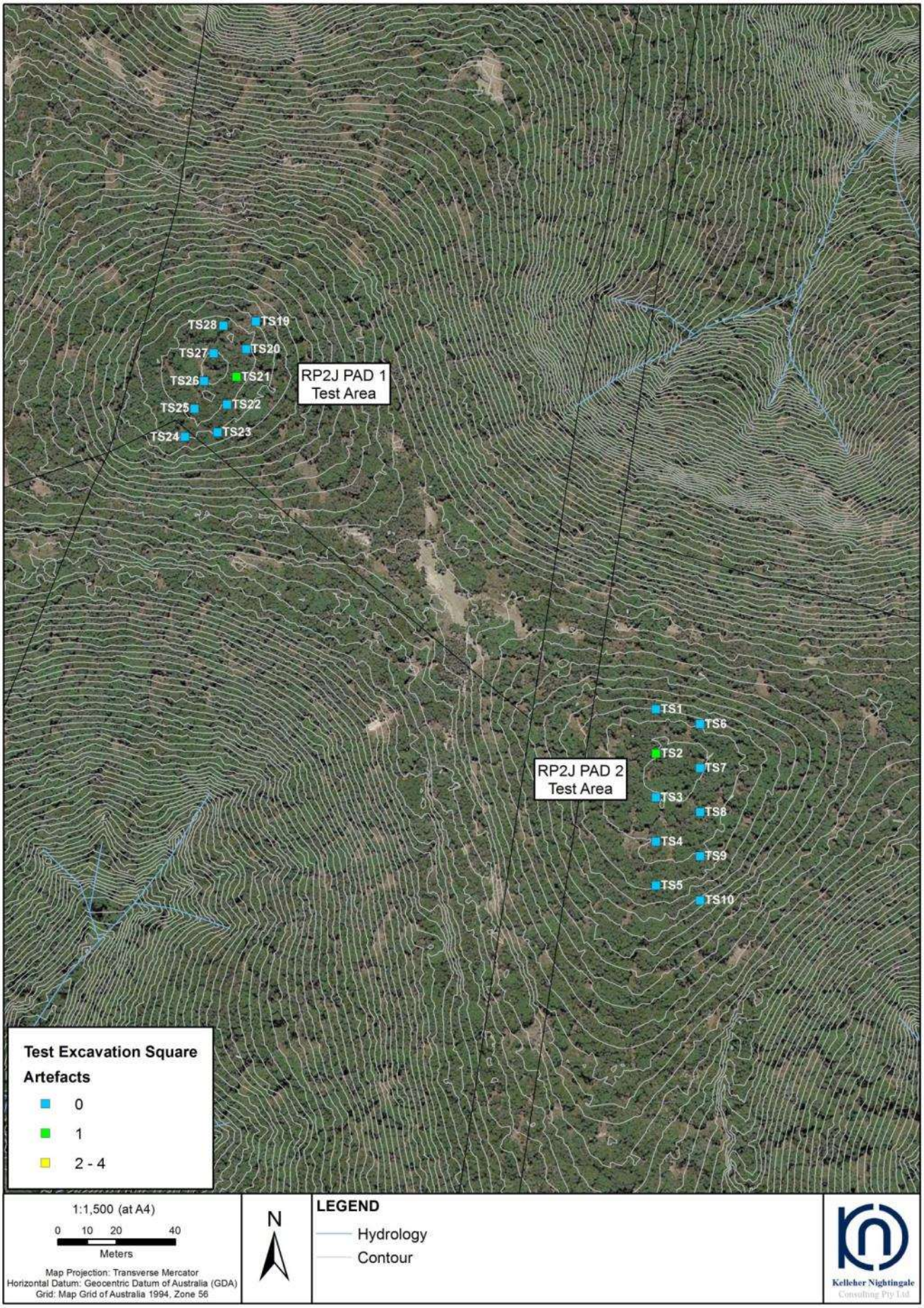


Figure 6. Archaeological test square locations and artefact density at RP2J PAD 1 and RP2J PAD 2

4.3 RP2J AFT3

4.3.1. Soils and disturbance

A total of eight 50 x 50 centimetre test squares were excavated in this area along two north-south oriented transects (Figure 5). The western transect was located across the crest adjacent to the base of a north east facing slope and contained test squares TS 11-15. The eastern transect was situated 15 metres to the east and comprised TS 16, 17 and 18. Placement of test squares at 10, 15 or 20 metre intervals along each transect was determined by the presence of existing pockets of localised disturbance.

The soil depth at RP2J AFT 3 was moderately deep with all test squares containing deposits with a maximum depth greater than 40 centimetres. The soil profile was characterised by humic sandy loam topsoil overlying sandy loam on top of sandy clay. Disturbance from natural factors was present within the test squares and included tree roots, animal burrows and bioturbation (earthworms, grubs) throughout the deposit.

The RP2J AFT 3 test area was vegetated with remnant native trees and bushes with a dense covering of leaf litter and tree detritus. The site exhibited areas of visible disturbance from the removal and redeposition of soil from the construction of a BMX track and associated dirt mounds. The test excavation program at site RP2J AFT 3 demonstrated that the disturbance from these activities was limited to the immediate vicinity of the track and mounds while the remaining areas of the site retained relatively undisturbed deposits.

I. 0-10cm: Mid grey brown sandy loam, humic, dry, friable. Frequent fine root systems. Small gravels <1cm 10%.
II. 10-40/45cm: Pale grey brown sandy loam, compact. Infrequent fine and small root systems. Charcoal flecking <2%. Small gravels < 2cm 10%.
III. 40/45cm-base: Dark brown sandy clay, compact. Clay content increasing with depth. Infrequent fine root systems

Figure 7. TS 13 north section and soil profile description

I. 0-12cm: Mid grey sandy loam, humic, dry, friable. Frequent fine root systems.
II. 12-50cm: Pale grey brown sandy loam, compact. Infrequent fine and small root systems. Charcoal flecking <2%. Small gravels < 2cm 10%.
III. 50cm-base: Mid brown sandy clay, compact. Clay content increasing with depth. Infrequent fine root systems

Figure 8. TS 18 south section and soil profile description

4.3.2. Artefact distribution

A total of 13 artefacts were recovered from five of the eight test squares excavated at RP2J AFT 3. Artefact densities for the RP2J AFT 3 test squares are shown in Table 2 and Figure 4.

Table 2. Test excavation artefact densities at RP2J AFT 3

Test Square	Total Artefacts	Test Square	Total Artefacts
11	4	17	3
14	2	18	2
15	2		

Artefact distribution within the RP2J AFT 3 test excavation area was characterised by a low density deposit in the southern portion of the tested area and a localised low density concentration of heat affected fragments at TS 11. The artefacts were predominantly recovered from the top 10 centimetres of the deposit (n=7); however, artefacts were recovered to a depth of 60 centimetres.

4.3.3. Lithics

A range of artefact raw materials were recovered during the test excavation. The dominant artefact raw material recovered by the test excavation at RP2J AFT 3 was silcrete (n=7). The material varied in colour from light grey to dark reddish brown and size of inclusions ranged from very fine to small. Smaller quantities of silicified tuff (n=3) and chert (n=3) were also found. The artefact assemblage comprised of unmodified flaking debitage and was predominantly flake fragments. Artefacts were predominantly small in size with 10 artefacts between 5-29 millimetres in size. The largest artefact was a silcrete flake (ID=13) which was recovered from TS 18 (Plate 4).

Table 3. RP2J AFT 3 - lithic database

ID	Square	Raw Material	Size (mm)	Weight (g)	Cortex (%)	Reduction	Flake Shape	L (mm)	W (mm)	Th (mm)	Platform	Termination
1	TS 11	Chert	15-19mm	1.22	0	Proximal Flake Fragment						
2	TS 11	Chert	10-14mm	0.46	0	Angular Fragment						
3	TS 11	Chert	15-19mm	0.56	0	Angular Fragment						
4	TS 11	Silicified Tuff	15-19mm	0.58	0	Angular Fragment						
5	TS 14	Silcrete	25-29mm	3.46	0	Angular Fragment						
6	TS 14	Silcrete	15-19mm	0.59	0	Angular Fragment						
7	TS 15	Silcrete	20-24mm	4.96	0	Proximal Fragment						
8	TS 15	Silcrete	30-34mm	8.72	0	Angular Fragment						
9	TS 17	Silcrete	10-14mm	0.80	0	Flake	Length >Width	9.43	7.71	8.01	Plain	Feather
10	TS 17	Silicified Tuff	30-34mm	6.88	0	Distal Flake Fragment						Feather
11	TS 17	Silicified Tuff	20-24mm	0.97	0	Angular Fragment						
12	TS 18	Silcrete	15-19mm	0.82	0	Angular Fragment						
13	TS 18	Silcrete	40-45mm	11.50	0	Flake	Width> Length	28.91	42.90	12.51	Plain	Feather

Plate 3. Artefact ID 7. Silcrete proximal flake fragment from TS 15

Plate 4. Artefact ID 13. Silcrete flake with large inclusions from TS 18

4.3.4. Discussion

The PACHCI Stage 2 survey report assessed site RP2J AFT 3 as having the potential for subsurface archaeological deposits due to a relatively low level of disturbance and being located in an archaeologically significant location at a creek junction. The test excavation program at site RP2J AFT 3 confirmed the presence of subsurface archaeological deposit. A total of 13 artefacts were recovered from five of the eight test excavation squares. The site area was redefined to exclude areas without surface or subsurface archaeology. The soils within RP2J AFT 3 exhibit a capping, derived from the upper slope, which has protected the Aboriginal objects underneath a soil blanket. Recovered objects represent moderate archaeological information as they demonstrate an intactness and presence infrequently identified in the Newcastle urban environment.

4.4 RP2J AFT 4

4.4.1. Soils and disturbance

A total of 14 50 x 50 centimetre test squares were excavated in this area along two north-south oriented transects (Figure 5). The western transect was located down a north facing slope and consisted of test squares TS 29-36. The eastern transect ran parallel at a distance of 10 metres and comprised test squares TS 37-42. Test squares were placed at 15 metre intervals along each transect.

The vegetation within the RP2J AFT 4 test area was characterised by dense grasses with mature trees. The test area had limited visible surface disturbance from past land use associated with the Hollywood shanty town and its subsequent demolition; however, the soil profile within the majority of test squares was characterised by a disturbed deposit of silty loam within historic/contemporary contaminates including glass, porcelain and tile overlying silty loam (Figures 9 and 12) or overlying a stripped basal clay (Figures 10 and 11). Soil depth across the test area was generally shallow with maximum depths of 20 centimetres or shallower; however, several test squares were deeper due to channels and holes which had been cut into the basal clay. Disturbance from natural factors was present within the test squares and included tree roots, animal burrows and bioturbation (earthworms, grubs) throughout the deposit. Several test squares also contained charcoal, baked basal clays and a deposits discoloured by burning events. These events appear to be associated with the historic/contemporary land use of the site.

I. 0-5cm: Mid grey silty loam, humic, dry, loose. Frequent fine root systems.
II. 5-15cm: Mid grey brown silty loam, dry, friable. Frequent inclusions of contaminants including tile and glass. Charcoal <5cm 10%
III. 15-25cm: Pale grey brown silty loam, dry, compact. Charcoal flecking <1cm 5%. Infrequent fine and small root systems.
IV. 25cm-base: Pale brown silty clay, compact. Clay content increasing with depth. Infrequent fine root systems. Orange clay nodules <5cm 5%.

Figure 9. TS 29 east section and soil profile description

I. 0-5cm: Dark grey brown silty loam, humic, dry, friable. Frequent fine root systems.
II. 5-13/30cm: Dark grey brown silty loam, moist, compact. Frequent inclusions of contaminants including glass and porcelain. Charcoal <5cm 5% predominanlty within east-west oriented channel in clay deposit. Orange clay nodules <10cm 5%.
III. 13/30cm-base: Pale brown silty clay, compact. Clay content increasing with depth. Infrequent fine root systems.

Figure 10. TS 31 west section and soil profile description

I. 0-3cm: Dark grey brown silty loam, humic, dry, friable. Frequent fine root systems.
II. 3-10/40cm: Dark grey brown silty loam, moist, compact. Charcoal <10cm 5% predominanlty within channel in clay deposit.
III. 10/40cm-base: Pale brown silty clay, compact. Clay content increasing with depth. Infrequent fine root systems. Portions of clay deposit baked in areas adjacent to channel.

Figure 11. TS 35 south section and soil profile description

I. 0-5cm: Dark grey silty loam, humic, dry, loose. Frequent fine root systems. Inclusions of contaminants including glass and porcelain.
II. 5-15cm: Mid grey brown silty loam, dry, compact. Inclusions of contaminants including glass and porcelain. Charcoal flecking <1cm 5%. Infrequent fine root systems.
III. 15-20/28cm: Pale grey and mid grey mottle silty loam, dry, compact.
IV. 20/28cm-base: Pale brown silty clay, compact. Infrequent fine root systems.

Figure 12. TS 40 west section and soil profile description

4.4.2. Artefact distribution and lithics

At RP2J AFT 4, one artefact was recovered from TS 36 in the disturbed top 10 centimetres of the deposit. The artefact consisted of a silcrete angular fragment that weighed 0.22 grams and had a size range of 10-14 millimetres. Three artefacts retained distal ends and exhibited feather terminations while two artefacts retained proximal ends and exhibited plain platforms. The deposit also contained contaminants including fragments of glass, porcelain and tile. No significant historic items or features were identified in the test squares.

4.4.3. Discussion

The PACHCI Stage 2 survey report assessed site RP2J AFT 4 as having the potential for subsurface archaeological deposits due to the identification of seven surface artefacts along a track and the presence of exposed soil profiles which indicated the presence of a less disturbed deposit below a heavily disturbed deposit containing glass, brick and concrete rubble. While the artefacts were found on the surface of the track, it was theorised that they may have eroded from the lower deposit which was visible along the edges of the track and that the deposit may therefore retain in situ artefacts.

The test excavation program excavated 14 test squares within the previously defined site extent in an area which had low visible surface disturbance and had the most potential for subsurface archaeological deposits (located near the junction of two creeks with gentler gradients). All test excavation squares within the RP2J AFT 4 test area contained a disturbed deposit with historic/contemporary contaminants that extended from the surface to a depth of between 5 and 40 centimetres. A single silcrete artefact was recovered from the test excavation area from within this disturbed deposit. In many instances the original soil profile was truncated or missing entirely with only mixed redeposited soils remaining on the site.

The test excavation program demonstrated that the area had been subject to extensive disturbance from past land use practices and that the surface artefacts identified on the unsealed track are likely to have originated from a disturbed deposit containing a mixture of the original upper soil deposit and historic/contemporary inclusions.

4.5 RP2J PAD 1 (RP2J IF 1)

4.5.1. Soils and disturbance

A total of 10, 50 x 50 centimetre test squares were excavated in this area along two north-south oriented transects (Figure 6). The western transect was located across upper slope and crest landforms and consisted of test squares TS 24-28. The eastern transect ran parallel at a distance of 10 metres and comprised test squares TS 19-23. Test squares were placed at 10 metre intervals along each transect.

The soil profile varied across the tested area. Test squares along the eastern transect containing shallow to moderately deep deposits consisting of dark humic silty loam topsoil overlying a bleached silty loam with occasional sandstone inclusions above pale silty clay (Figure 13). Test squares at the southern end of the western transect were generally deeper and contained larger and more frequent sandstone inclusions (Figure 14). Disturbance from natural factors was present within the test squares and included tree roots, animal burrows and bioturbation (earthworms, grubs) throughout the deposit. The soil profile was self-cycling through an aggrading-deflationary process, but the large inclusions indicated degrading bedrock. The result is a horizontally stable profile, however the apparently aggressive exfoliation of the bedrock is continually pushing the subsurface (A-B units) toward the top of the cycle, where erosion will replace or mix the deposit. The archaeological implication is that the soils are not intact and do not curate objects long term.

The vegetation within the RP2J PAD 1 test area consisted of remnant native trees and bushes with a dense covering of leaf litter and tree detritus. Visible surface disturbance was limited to an unsealed walking track and an itinerant camp with temporary structures. The test excavation program at site RP2J PAD 1 demonstrated that disturbance was limited across the tested area. The topographic location of the area indicates that the soils developed in situ and that horizontal movement of soils was limited.

V. 0-4cm: Dark grey silty loam, humic, dry, loose. Frequent fine root systems.
VI. 4-10cm: Pale grey brown silty loam, dry, compact. Small gravels <2cm 30%. Sandstone inclusions <5cm 10%. Infrequent fine and small root systems.
VII. 10-20cm: Pale grey brown silty loam, dry, compact. Sandstone inclusions <10cm 20%. Infrequent fine-medium root systems.
VIII. 20cm-base: Pale brown silty clay, compact. Infrequent fine-medium root systems.

Figure 13. TS 20 south section and soil profile description

V. 0-5cm: Dark grey silty loam, humic, dry, loose. Frequent fine root systems.
VI. 5-18cm: Mid grey brown, silty loam, dry, compact. Sandstone inclusions <5cm 5%. Infrequent fine and small root systems.
VII. 18cm-base: Light grey brown, silty loam, dry, compact. Sandstone inclusions <20cm 30% increasing with depth. Infrequent fine and small root systems.

Figure 14. TS 25 east section and soil profile description

4.5.2. Artefact distribution and lithics

At RP2J PAD 1, one heat affected silicified tuff angular fragment was recovered from TS 21 between 30 and 40 centimetres below the ground surface (Plate 5). The artefact had a weight of 1.43 grams and a size range of 20-24 millimetres.

Plate 5. Artefact ID 15. Silicified tuff angular fragment from TS 21

4.5.3. Discussion

The PACHCI Stage 2 survey report assessed RP2J PAD 1 as having the potential for subsurface archaeological deposits due to archaeologically favourable topography and soils combined with a relative proximity to water and known archaeological sites. The program excavated 10 test squares within the previously defined site extent. A single silicified tuff angular fragment was recovered during the test excavation program at the site. Due to the presence of an artefact at the site, it was reclassified/renamed RP2J IF 1. The test excavation program demonstrated that while subsurface deposits existed at the site, the soil profile precluded the preservation of the archaeological objects in situ. Expected archaeological activities for the site (maintenance, transit, short term camp) suggest a low artefact frequency, combining this with the fluctuating soil matrix, indicates a low potential to retrieve additional archaeological information.

4.6 RP2J PAD 2 (RP2J IF 2)

4.6.1. Soils and disturbance

A total of 10, 50 x 50 centimetre test squares were excavated in this area along two north-south oriented transects that were located across upper slope and crest landforms (Figure 6). The western transect consisted of test squares TS 1-5 while the eastern transect ran parallel at a distance of 15 metres and comprised test squares TS 6-10. Test squares were placed at 15 metre intervals along each transect.

The vegetation within the RP2J PAD 2 test area consisted of remnant native trees and bushes with a dense covering of leaf litter and tree detritus. The soil profile was generally consistent across the tested area and characterised by dark humic silty loam topsoil overlying a pale silty loam with occasional sandstone inclusions above pale silty clay (Figure 16). The northern most test square (TS 1) contained larger and more frequent sandstone inclusions (Figure 15). Disturbance from natural factors was present within the test squares and included tree roots, animal burrows and bioturbation (earthworms, grubs) throughout the deposit.

Similar to RP2J PAD 1, the topographic location of the area indicates that the soils developed in situ and that horizontal movement of soils was limited. The soil profile was self-cycling through an aggrading-deflationary process, but the large inclusions indicated degrading bedrock. The result is a horizontally stable profile, however the exfoliation of the bedrock is continually pushing the subsurface (A-B units) toward the top of the cycle, where erosion will replace or mix the deposit. The archaeological implication is that the soils are not intact and do not curate objects long term.

I. 0-4cm: Dark grey brown silty loam, humic, dry, loose. Frequent fine root systems.
II. 4-20cm: Mid grey brown, silty loam, dry, compact. Small gravels <5cm 15%. Infrequent fine and small root systems.
III. 20cm-base: Light grey brown, silty loam, dry, compact. Large stones <20cm 40% increasing with depth. Infrequent fine and small root systems.

Figure 15. TS 1 west section and soil profile description

I. 0-2cm: Dark grey brown silty loam, humic, dry, friable. Frequent fine root systems.
II. 2-15/20cm: Light grey brown silty loam, dry, compact. Small gravels <1cm 10%. Infrequent fine and small root systems. Frequent charcoal flecking with larger charcoal nodules <5cm <10% above clay deposit
III. 15/20cm-base: Mid brown silty clay, sticky, compact. Clay deposit baked in areas adjacnet to burnt root channel.

Figure 16. TS 8 north section and soil profile description

4.6.2. Artefact distribution and lithics

At RP2J PAD 2, one heat affected silicified tuff angular fragment was recovered from TS 2 between 30 and 40 centimetres below the ground surface (Plate 6).

Plate 6. Artefact ID 16. Silcrete medial flake fragment from TS 2

4.6.3. Discussion

The PACHCI Stage 2 survey report assessed RP2J PAD 2 as having the potential for subsurface archaeological deposits due to archaeologically favourable topography and soils combined with a relative proximity to water and known archaeological sites. The program excavated 10 test squares within the previously defined site extent. A single artefact was recovered during the test excavation program at the site. Due to the presence of an artefact at the site, it was reclassified/renamed RP2J IF 2. The test excavation program demonstrated that while subsurface deposits existed at the site, the soil profile precluded the preservation of the archaeological objects in situ (the same result as RP2J PAD 1). Expected archaeological activities for the site (maintenance, transit, short term camp) suggest a low artefact frequency, combining this with the fluctuating soil matrix indicates a low potential to retrieve additional archaeological information.

5 Aboriginal Community Consultation and Participation

5.1 Aboriginal stakeholder consultation

Roads and Maritime is committed to effective consultation with Aboriginal communities regarding Roads and Maritime activities and their potential for impact on Aboriginal cultural heritage. The Roads and Maritime PACHCI was developed to provide a consistent means of effective consultation with Aboriginal communities regarding activities which may impact on Aboriginal cultural heritage and a consistent assessment process for Roads and Maritime activities across NSW.

The aim of consultation is to integrate cultural and archaeological knowledge and ensure registered stakeholders have information to make decisions on Aboriginal cultural heritage. For the preparation of this CHAR, consultation with Aboriginal people has been undertaken in accordance with the project SEARs, the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (OEH 2010a) and the requirements of Clause 80C of *the National Parks and Wildlife Regulation 2009*.

Roads and Maritime advertised (Appendix A) and contacted potential Aboriginal stakeholders identified from government agency notification responses. Roads and Maritime invited Aboriginal people who hold knowledge relevant to determining the cultural heritage significance of Aboriginal objects and Aboriginal places in the area in which the proposed activity was to occur to register an interest in a process of community consultation. Investigations for the Newcastle Inner City Bypass between Rankin Park and Jesmond have included consultation with 17 Aboriginal community groups and individuals as listed in Table 4.

Table 4. Registered Aboriginal stakeholders

Group	Representative / Contact
A1 Indigenous Services	Carolyn Hickey
Aboriginal and Native Title Corporation (Valley ELM Corp)	Irene Ardler
Amanda Hickey Cultural Services	Amanda Hickey
Awabakal Descendants Traditional Owners	Peter Leven
Awabakal Local Aboriginal Land Council	Rob Russell (CEO)
Awabakal Traditional Owners Aboriginal Corporation	Kerrie Brauer
Didge Ngunawal Clan	Paul Boyd & Lilly Carroll
Hunter Valley Cultural Surveying	Luke Hickey
Kerrie Brauer & Ors on behalf of the Awabakal and Guringai People (Awabakal and Guringai People)	Kerrie Brauer
Kevin Duncan	Kevin Duncan
Lower Hunter Aboriginal Incorporated	David Ahoy
Murra Bidgee Mullangari Aboriginal Corporation Cultural Heritage	Darleen Johnson (Carroll)
Wattaka Wonnarua Cultural Consultancy Services	Des Hickey
Widescope Indigenous Group	Steven Hickey
Wonn1(Entity of Kauwul Pty Ltd)	Suzie Worth (for Arthur C Fletcher)
Wonnarua Elder LHWCS	Tom Miller
Yinarr Cultural Services	Kathie Steward Kinchela

The formal consultation process has included:

- advertising for registered stakeholders in The Koori Mail (3/05/2017), National Indigenous Times (3/05/2017) and Newcastle Herald (3/05/2017) (refer Appendix A);
- government agency notification letters;
- notification of closing date for registration;
- an Aboriginal Focus Group (AFG) meeting to discuss archaeological assessment methodology and cultural assessment (refer Appendix B);
- provision of proposed archaeological assessment methodology (28 day review period) outlining the methodology to prepare the CHAR;
- provision of draft CHAR for review (allowing a minimum 28 day review);
- a second AFG meeting to discuss investigation results, draft CHAR and detailed mitigation strategies (refer Appendix B);
- ongoing consultation with the local Aboriginal community.

5.2 PACHCI Stage 2: Survey and cultural assessment report

Subsequent to the field survey, Awabakal Local Aboriginal Land Council provided a survey and cultural assessment report for the Roads and Maritime in accordance with the PACHCI. The comments were incorporated into the assessment and included in the PACHCI Stage 2 survey report.

Specific Awabakal Local Aboriginal Land Council comments stated that the identified archaeological sites were of "extremely high significance":

> Reason being, there has evidently been a lot of different disturbances in the study area but Artefacts are still present. We strongly believe all Artefacts & sites are of extremely high significance to the Aboriginal community.

The identified PAD areas were also culturally significant:

> PAD's are very significant cultural landscape features as well as places of spiritual and social value.

and

> Given the location of PAD areas with 360 degree views, it is highly likely that this area was used quite frequently by Aboriginal people for the purpose of regular stays/camping as well as being a regular travel route.

5.3 Aboriginal cultural values

As part of the cultural assessment, registered Aboriginal stakeholders were invited to identify individuals they regarded as knowledge holders for the area. To date no specific knowledge holders have been identified for the study area although the Aboriginal community has identified cultural heritage values for the study area (see CHAR review).

5.4 CHAR review

The draft CHAR was provided to registered Aboriginal stakeholders for review and comment. All registered Aboriginal stakeholders were provided a minimum 28 day period for review. Comments and information received from stakeholders during this period are attached in full in Appendix C and summarised below.

Responses to the draft CHAR and proposed salvage excavation methodology were received from Awabakal Local Aboriginal Land Council, Awabakal Traditional Owners Aboriginal Corporation (Awabakal and Guringai Pty Ltd), Lower Hunter Aboriginal Incorporated, Wonnarua Elders LHWCS and Murra Bidgee Mullangari Aboriginal Corporation Cultural Heritage.

Awabakal Local Aboriginal Land Council (email received 26/10/2017) expressed the necessity for Aboriginal stakeholders who have cultural knowledge relevant to determining the significance of Aboriginal objects and/or places as relevant to the proposed project area involved in the consultation process. In this regard, the registration of and consultation with Aboriginal people for the Rankin Park to Jesmond project has been undertaken in accordance with the SEARs, Roads and Maritime PACHCI, the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* and the requirements of Clause 80C of the *National Parks and Wildlife Regulation 2009*.

The Awabakal Local Aboriginal Land Council participated in the PACHCI Stage 2 survey and provided comments on the significance of the Aboriginal archaeological sites identified within the project area as part of that process (see Section 5.2). No further information on the significance of Aboriginal objects and/or places as relevant to the proposed project area was provided in the CHAR review email received 26/10/2017.

Awabakal Traditional Owners Aboriginal Corporation (letter dated 30/10/2017) noted the importance of cultural knowledge and connection to Country. In this regard, the registration of and consultation with Aboriginal people for the Rankin Park to Jesmond project has been undertaken in accordance with the SEARs, Roads and Maritime PACHCI, the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* and the requirements of Clause 80C of the *National Parks and Wildlife Regulation 2009*.

Awabakal Traditional Owners Aboriginal Corporation expressed the need for significance assessments to include cultural values (and not just archaeological values). Awabakal Traditional Owners Aboriginal Corporation identified the cultural value and significance of the project area as high and holistic (letter dated 30/10/2017). Awabakal Traditional Owners Aboriginal Corporation stated that they "cannot separate sections of the project area to be more important than others; each site is connected to the other" (letter dated 30/10/2017). In response, comments provided by the Awabakal Traditional Owners Aboriginal Corporation regarding cultural (social) values of Aboriginal cultural and archaeological sites have been included in the CHAR (section 7).

Awabakal Traditional Owners Aboriginal Corporation recommended that the collection of surface artefacts identified during the survey within the project area in addition to a collection of any visible surface artefacts within the project area should be undertaken (letter dated 30/10/2017). Following these comments, the CHAR was revised to

recommend salvage surface collection of Aboriginal cultural heritage objects at all sites (RP2J AFT 3, RP2J AFT 4, RP2J IF 1 and RP2J IF 2) in addition to the recommendation of salvage excavation for RP2J AFT 3.

Awabakal Traditional Owners Aboriginal Corporation stated that salvage and collection of cultural heritage "is paramount, and needs to be included within the Project Approval by the Department of Planning" (letter dated 30/10/2017).

Awabakal Traditional Owners Aboriginal Corporation stated their preference for salvaged Aboriginal objects to remain on country in a protected conservation area (letter dated 30/10/2017). In keeping with these comments Section 10 of the CHAR was revised and outlines a process to allow Aboriginal stakeholder to make an application for the care of recovered Aboriginal cultural objects.

Awabakal Traditional Owners Aboriginal Corporation also commented on a range of management outcomes related to planning and impact assessments. Following these comments, Section 10 of the CHAR was updated to refine the recommended management process and clarify the impact assessment process.

Lower Hunter Aboriginal Incorporated (email received 26/10/2017) stated that they approve the draft CHAR report.

Wonnarua Elders LHWCS (email 29/9/2017) stated that all four archaeological sites are significant, regardless of disturbance levels, and all four sites should be salvaged. Following these comments, the CHAR was revised to recommend salvage collection of Aboriginal cultural heritage objects at all sites (RP2J AFT 3, RP2J AFT 4, RP2J IF 1 and RP2J IF 2) in addition to the recommendation of salvage excavation for RP2J AFT 3

Murra Bidgee Mullangari Aboriginal Corporation Cultural Heritage (letter dated 27/09/2017) expressed the need for registered Aboriginal parties to hold relevant cultural knowledge and to have the experience to determine the significance of Aboriginal objects and/or place(s) within the proposed project area. In this regard, the registration of and consultation with Aboriginal people for the Rankin Park to Jesmond project has been undertaken in accordance with the SEARs, Roads and Maritime PACHCI, the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* and the requirements of Clause 80C of the *National Parks and Wildlife Regulation 2009*.

6 Summary and analysis of background information

Analysis of the background information presented in Sections 2, 3, 4 and 5 allows an assessment of the cultural heritage values within the project area to be made. Combining data from historical/ethnographic sources, Aboriginal community consultation, landscape evaluation and archaeological context provides an insight into how the landscape around the project area was used and what sort of events took place in the past.

The Newcastle region remains important to local Aboriginal people. The consultation process to date has identified a number of people who have indicated their interest in the Newcastle area, indicating a link that members of the contemporary Aboriginal community retain to the land.

Archaeological sites identified by previous archaeological investigations demonstrate that the region was utilised for a diverse range of activities by past Aboriginal people. Archaeological sites in the region are predominantly artefact scatters that are spatially more frequent and contain higher densities of stone artefacts in close proximity to marine, estuarine and fresh water resources. Lower density sites occur along ridges and hillslopes. The location of grinding groove and quarry sites were determined by the local geology. Grinding grooves have been identified in the region on exposed sandstone outcrops bordering creek lines while sources of stone artefact raw material were available at Glenrock approximately three kilometres south east of the current project area.

Archaeological investigations within the project area identified two artefact scatters (RP2J AFT 3 and RP2J AFT 4) on raised landforms overlooking the junction of unnamed first order ephemeral creeks and two isolated artefacts (RP2J IF 1 and RP2J IF 2,) on the crest of localised highpoint on a north west running ridge.

An archaeological test excavation confirmed the presence of subsurface archaeological deposit at all four archaeological sites:

- RP2J AFT 3
- RP2J AFT 4
- RP2J IF 1 (formerly RP2J PAD 1)
- RP2J IF 2 (formerly RP2J PAD 2)

Archaeological deposit at RP2J AFT 3 was found to be intact and exhibited moderate archaeological information. The remaining three sites (RP2J AFT 4, RP2J IF 1, RP2J IF 2) all exhibited disturbed soil profiles with low levels of archaeological information and low potential to provide additional archaeological information. Aboriginal stakeholders have identified that all Aboriginal sites within the project area have high levels of cultural significance.

6.1 Summary of known Aboriginal archaeological sites within the project area

The archaeological value of the project area was previously assessed as part of the PACHCI Stage 2 survey report and subsequent test excavation program (see Sections 3 and 4). The PACHCI Stage 2 survey report included a review of background information, including identification of previously recorded Aboriginal sites registered on the AHIMS database, predictive modelling, Aboriginal community consultation and a full coverage archaeological field survey.

The PACHCI Stage 2 survey report and subsequent test excavation have identified four locations of Aboriginal archaeological value containing Aboriginal objects within the project area (Table 5). The locations of these sites are shown on Figure 17.

Table 5. Identified Aboriginal archaeological sites within the project area

Site Name	AHIMS ID	Site Feature
RP2J AFT 3	tbc	Artefact
RP2J AFT 4	tbc	Artefact
RP2J IF 1	tbc	Artefact
RP2J IF 2	tbc	Artefact

6.2 Aboriginal archaeological sites within the project area

Site name: RP2J AFT 3
AHIMS site ID: tbc

Site RP2J AFT 3 was an artefact scatter situated on an elevated flat overlooking the junction of two unnamed north east flowing ephemeral creeks. The site was located in the south western portion of Lot 1 DP774078 approximately 300 metres south east of Minimbah Close. The PACHCI Stage 2 survey identified a surface artefact scatter at the site that comprised one tuff/mudstone flake and two pieces of a tuff/mudstone flake which were located on a BMX track.

An archaeological test excavation was undertaken at the site by KNC in August 2017. The program excavated eight test squares within the previously defined site extent. A total of 13 artefacts were recovered from five of the eight test excavation squares. The test excavation program demonstrated that an intact archaeological deposit was present at the site within the proposed impact area.

Site name: RP2J AFT 4
AHIMS site ID: tbc

Site RP2J AFT 4 was an artefact scatter located on the crest and north facing slope of a ridge spur. The site overlooks the junction of Dark Creek and several unnamed tributaries approximately 120 metres to the north. The site is located approximately 120 metres south east of the junction of Victory Parade and Myall Street within Lot 1 DP341979 and Lot 1 DP774078. The PACHCI Stage 2 survey identified a surface artefact scatter at the site which comprised a single silcrete proximal flake fragment and a cluster of six artefacts comprising flakes and flake fragments of silcrete and tuff/mudstone that were identified within surface exposures on an unsealed track.

An archaeological test excavation was undertaken at the site by KNC in August 2017. The program excavated 14 test squares within the previously defined site extent in an area which had low visible surface disturbance and had the most potential for subsurface archaeological deposits (located near the junction of two creeks and gentler gradients). All test excavation squares within the RP2J AFT 4 test area contained a disturbed deposit. Site soils were deeply truncated, completely stripped and or redeposited and sometimes mixed with non-significant historic fill. A single artefact was recovered from the test excavation area from within the disturbed deposit.

The test excavation program demonstrated that the area had been subject to extensive disturbance from past land use practices and that the surface artefacts identified on the unsealed track are likely to have originated from a disturbed deposit containing a mixture of the original upper soil deposit and historic/contemporary disturbance.

Site name: RP2J IF 1 (formerly RP2J PAD 1)
AHIMS site ID: tbc

Site RP2J IF 1 was an isolated artefact situated on the crest of localised highpoint on a north west running ridge that formed the watershed separating the catchments of Blue Wren Creek in the south and Dark Creek in the north. The site was located within remnant native vegetation approximately 240 metres east of Claymore Drive within Lot 10 DP826092. The site was initially identified as an area of archaeological potential (RP2J PAD 1) during the PACHCI Stage 2 survey. The extent of the PAD area was clearly defined by the contours of the natural crest and fire trails to the east and steep slopes to the north, south and west.

An archaeological test excavation was undertaken by KNC in August 2017. The program excavated 10 test squares within the previously defined PAD extent. A single artefact was recovered during the test excavation program at the site. The test excavation program demonstrated that while subsurface deposits exist at the site, the low density of artefacts recovered and fluctuating soil profile indicated a low potential for further archaeological information.

Site name: RP2J IF 2 (formerly RP2J PAD 2)
AHIMS site ID: tbc

Site RP2J IF 2 was an isolated artefact situated on the crest of localised highpoint on a north west running ridge which formed the watershed separating the catchments of Blue Wren Creek in the south and Dark Creek in the north. The site was located within an area of remnant native vegetation approximately 460 metres east of Claymore Drive within Lot 401 DP1197237. The site was initially identified as an area of archaeological potential (RP2J PAD 2) during the PACHCI Stage 2 survey. The extent of the PAD area was clearly defined by the contours of the natural crest and fire trails to the south and west and steep slopes to the north and east.

An archaeological test excavation was undertaken by KNC in August 2017. The program excavated 10 test squares within the previously defined PAD extent. A single artefact was recovered during the test excavation program at the site. The test excavation program demonstrated that while subsurface deposits exist at the site, the low density of artefacts recovered and fluctuating soil profile indicated a low potential for further archaeological information.

Figure 17. Archaeological sites within the project area

7 Cultural Heritage Values and Statement of Significance

7.1 Significance assessment criteria

One of the primary steps in the process of cultural heritage management is the assessment of significance. Not all sites are equally significant and not all are worthy of equal consideration and management (Sullivan and Bowdler 1984; Pearson and Sullivan 1995:7). The determination of significance can be a difficult process as the social and scientific context within which these decisions are made is subject to change (Sullivan and Bowdler 1984). This does not lessen the value of the heritage approach, but enriches both the process and the long term outcomes for future generations as the nature of what is conserved and why, also changes over time.

The assessment of significance is a key step in the process of impact assessment for a proposed activity as the significance or value of an object, site or place will be reflected in resultant recommendations for conservation, management or mitigation.

The *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010) requires significance assessment according to criteria established in the *Australia ICOMOS Burra Charter*, 1999 (Australia ICOMOS 1999). The *Burra Charter* and its accompanying guidelines are considered best practice standard for cultural heritage management, specifically conservation, in Australia.

Guidelines to the *Burra Charter* set out four criteria for the assessment of cultural significance:

- Aesthetic value - relates to the sense of the beauty of a place, object, site or item;
- Historic value - relates to the association of a place, object, site or item with historical events, people, activities or periods;
- Scientific value - scientific (or research) value relates to the importance of the data available for a place, object, site or item, based on its rarity, quality or representativeness, as well as on the degree to which the place (object, site or item) may contribute further substantial information; and
- Social value - relates to the qualities for which a place, object, site or item has become a focus of spiritual, political, national or other cultural sentiment to a group of people. In accordance with the OEH *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW*, the social or cultural value of a place (object, site or item) may be related to spiritual, traditional, historical or contemporary associations. "Social or cultural value can only be identified though consultation with Aboriginal people" (OEH 2011:8).

There are four locations of recorded Aboriginal cultural heritage values within the project area. The significance assessment for the identified archaeological sites has focussed on the social/cultural, historic, scientific and aesthetic significance of Aboriginal heritage values as identified in *The Burra Charter*.

Social Values

This area of assessment concerns the value/s of a place, feature or site to a particular community group, in this case the local Aboriginal community. Aspects of social significance are relevant to sites, objects and landscapes that are important or have become important to the local Aboriginal community. This importance involves both traditional links with specific areas as well as an overall concern by Aboriginal people for sites generally and their continued protection. Aboriginal cultural significance may include social, spiritual, historic and archaeological values.

It has been identified during the consultation process that the local area has cultural heritage value (social value) to the local Aboriginal community.

Awabakal Traditional Owners Aboriginal Corporation (letter dated 30/10/2017) noted that:

> This area, as well as all of the rest of our Traditional Country, is of great significance and important to us as Awabakal, as it has been part of the greater area that has provided for and shaped the beliefs and cultural practices of our People for thousands of years. All of these areas have and still play a major role in the lives of our People for many and varied reasons that draw us to focus on what it is to be an Awabakal and Guringai people.
>
> This area has not just a physical presence within the Cultural Heritage of the Awabakal and Guringai People, but it is part of our oral history and a place of spiritual significance. The landforms and resources of this locale fulfilled not just the basic needs that underpinned our Peoples subsistence but also satisfied the many other aspects that made up what can be described here as being part of the Cultural foundations of our People.
>
> As already previously stated, this area is of high significance to our People and therefore it would be expected that after the many generations of our People that have walked the pathways of their Ancestors, it

is obvious that there would be many areas that contain evidence of this connection, resulting from occupation on varying levels.

There are physical reminders left by our Ancestors which provide us as Descendants of the Awabakal and Guringai Peoples an opportunity to make a physical connection through time with our Ancestors. This connection is one of those avenues that produce in us the sense of perception, appreciation, familiarity and recognition of who we are and where we belong as Awabakal Guringai People, which is our birthright.

Therefore the Cultural Value and Significance remains high, which is attributed to our Cultural Heritage understanding of the connectivity and aspects of the regions holistic perspectives, thus emphasizing the importance of the whole, instead of a Scientific/Archaeological Value aspect of the independence of its site specific parts.

Historic Values

Historical research did not identify any information regarding specific historical significance of identified Aboriginal archaeological sites within the project area. No specific historical significance or continued use for the sites within the project area has been provided by the registered Aboriginal stakeholders to date.

Scientific Values

Scientific values have been assessed for the identified Aboriginal archaeological sites in the project area. These values have been developed based on significance criteria of research potential (including integrity/condition, complexity and archaeological potential), representativeness and rarity. Identified archaeological sites in the project area displayed both low and moderate scientific significance (Refer to Section 7.2).

Sites of low archaeological significance are those that do not offer archaeological research potential and are unlikely to provide any further scientifically valuable information. Sites with moderate significance are those that offer the potential to yield information that will contribute to the growing holistic understanding of the Aboriginal cultural landscape of the project area. Archaeological investigation of moderately significant sites will contribute knowledge regarding site type interrelationships, cultural use of landscape features and occupation patterns.

Aesthetic Values

Aesthetic values are often closely related to the social values of a site or broader cultural landscape. Aspects may include scenic sights, smells and sounds, architectural fabric and creative aspects of a place.

Regarding Aboriginal sites identified within the project area, no specific associated aesthetic values have been identified by registered Aboriginal community groups to date. Archaeologically, the project area does not contain these values.

7.2 Statement of significance

The project area contains four identified Aboriginal archaeological sites as defined under the *National Parks and Wildlife Act 1974*. Significance assessment has focussed on the intactness, representativeness and research potential of these sites within the landscape.

RP2J AFT 3
Site RP2J AFT 3 represents a commonly occurring site type, consisting of an open artefact scatter of low density; however, the site itself is important as few recorded Aboriginal sites exist in the immediate urban area. In addition, the site displayed a relatively low level of disturbance and is located in an archaeologically significant location on raised landforms at a creek junction. The site demonstrates moderate scientific value and it is likely that further investigation could contribute to our understanding of past Aboriginal landscape use within the now urbanised area.

Based on the intactness, representativeness, and research potential of the site, RP2J AFT 3 is assessed as displaying moderate archaeological significance. The cultural significance of site RP2J AFT 3, as part of the holistic and interconnected landscape has been assessed as displaying high cultural significance by Aboriginal stakeholders.

RP2J AFT 4
Site RP2J AFT 4 represents a commonly occurring site type, consisting of an open artefact scatter of low density. The artefacts at the site are typical of the region in terms of type and raw material. The site has been subject to extensive disturbance from historic/contemporary land use practices and environmental factors. Artefacts identified at this site form part of a disturbed deposit. Low to nil potential exists at the site for intact deposit. The site demonstrates low scientific value and it is unlikely that further investigation could contribute to our understanding of Aboriginal landscape use in the region.

Based on the intactness, representativeness and research potential of the site, RP2J AFT 4 is determined to have low archaeological significance. The cultural significance of site RP2J AFT 4, as part of the holistic and interconnected landscape has been assessed as displaying high cultural significance by Aboriginal stakeholders.

RP2J IF 1
Site RP2J IF 1 represents a commonly occurring site type, consisting of an isolated artefact on a crest landform of a north west running ridge. The artefact at the site is typical of the region in terms of type and raw material. While the test excavation program demonstrated that the site retained subsurface archaeological deposit, the very low density of artefacts recovered at the site and fluctuating soil matrix make it unlikely that further investigation of the site would contribute to our understanding of Aboriginal landscape use in the region. In short, Aboriginal objects exist at RP2J IF 1, but they were found in a soil structure not capable of exhibiting contextual archaeological information.

Based on the intactness, representativeness and research potential of the site, RP2J IF 1 is determined to have low archaeological significance. The cultural significance of site RP2J IF 1, as part of the holistic and interconnected landscape has been assessed as displaying high cultural significance by Aboriginal stakeholders.

RP2J IF 2
Site RP2J IF 2 represents a commonly occurring site type, consisting of an isolated artefact on a crest landform of a north west running ridge. The artefact at the site is typical of the region in terms of type and raw material. While the test excavation program demonstrated that the site retained subsurface archaeological deposit, the very low density of artefacts recovered at the site and fluctuating soil matrix make it unlikely that further investigation of the site would contribute to our understanding of Aboriginal landscape use in the region.

Based on the intactness, representativeness and research potential of the site, RP2J IF 2 is determined to have low archaeological significance. The cultural significance of site RP2J IF 2, as part of the holistic and interconnected landscape has been assessed as displaying high cultural significance by Aboriginal stakeholders.

8 Impact Assessment and Mitigation Strategies

8.1 Proposed activity

Roads and Maritime is seeking approval to construct the fifth stage of the Newcastle Inner City Bypass. The fifth stage of this project would include the construction of 3.4 kilometres of new four lane divided road between Lookout Road, New Lambton Heights and Newcastle Road, Jesmond. The proposed works involve the following key elements:

- New road with two lanes in each direction, separated by a median
- Three interchanges, consisting of:
    - Northern interchange providing access to Newcastle Road and the existing Jesmond to Shortland section of the Newcastle Inner City Bypass. The full interchange provides all movements to/from the bypass and Newcastle Road
    - Hospital Interchange providing access between the John Hunter Hospital precinct and the bypass. The full interchange provides all movements to/from the bypass
    - Southern interchange providing access to Lookout Road and the existing Kotara to Rankin Park section of the Newcastle Inner City Bypass. The bypass would travel under McCaffrey Drive. The half interchange provides connection in both directions on Lookout Road
- Structures along the road to allow for drainage, animal and bushwalker access
- Tie in and upgrades to connecting roads, including Lookout Road, McCaffrey Drive and Newcastle Road
- Large cut and fill embankments due to steep and undulating terrain
- Pedestrian and cycling facilities, including a shared path bridge over Newcastle Road
- Noise barriers and/or architectural treatment, as required
- Permanent operational water quality treatment measures.

The entirety of the project area will be impacted by road construction and associated works. In total four Aboriginal archaeological sites will be impacted by road construction. Proposed impacts to sites identified within the project area detailed in Table 6 and shown in Figure 18.

Table 6. Proposed impact to Aboriginal archaeological sites within the project area

Site Name	AHIMS ID	Description	Archaeological Significance/Cultural Significance	Type / Degree of Harm	Consequence of Harm
RP2J AFT 3	tbc	Low density surface artefact scatter with subsurface archaeological deposit located on an elevated flat overlooking the junction of two unnamed north east flowing creeks	Moderate/ High	Direct / Total	Total loss of value
RP2J AFT 4	tbc	Low density surface artefact scatter located within a disturbed context on the crest and north facing slope of a ridge spur	Low/ High	Direct / Total	Total loss of value
RP2J IF 1	tbc	Isolated artefact located on the crest of localised highpoint on a north west running ridge that forms the watershed separating the catchments of Blue Wren Creek in the south and Dark Creek in the north.	Low/ High	Direct / Total	Total loss of value
RP2J IF 2	tbc	Isolated artefact located on the crest of localised highpoint on a north west running ridge that forms the watershed separating the catchments of Blue Wren Creek in the south and Dark Creek in the north.	Low/ High	Direct / Total	Total loss of value

8.2 Avoiding and/or mitigating harm

All identified Aboriginal cultural and archaeological sites identified within the project area have been considered by Roads and Maritime in relation to the proposed road upgrade and associated activities. While conservation is the best approach when considering Aboriginal heritage, direct impact is unfortunately unavoidable due to the requirements of the road upgrade.

The CHAR evaluated the potential harm of the project on Aboriginal archaeological heritage in terms of Ecologically Sustainable Development (ESD). The ESD assessment of Aboriginal heritage evaluated: long-term and short-term considerations, precautionary environmental impacts, maintenance and enhancement for future generations and cost/benefit of impacting on archaeological objects. In this regard, road designs utilised conservation principles by consolidating the design to closely align with previous development (limiting fragmentation) and limiting the construction footprint as much as practical to reduce the cumulative harm of Aboriginal heritage.

The scientific value of archaeological sites is linked to the physical information the sites contain. The salvaged information will increase our understanding, strengthen our interpretations and improve ongoing and future management of Aboriginal heritage in the surrounding area. The spatial extent, presence of archaeological deposits and activities related to Aboriginal occupation at archaeological sites in the surrounding area are not yet fully understood due to limited archaeological investigations. In this light, the project offers an opportunity to advance the interpretation and management of Aboriginal heritage of the surrounding area by contributing to the baseline of information available to future heritage assessments.

The Aboriginal cultural significance of the impacted sites and project area as a whole was assessed as high. Consultation with Aboriginal stakeholders has determined that the loss of intrinsic Aboriginal cultural value of impacted sites cannot be offset; however, mitigation including the collection of surface artefacts and the safekeeping of salvaged artefacts in a protected conservation area has been recommended by the Aboriginal community.

Suitable recommendations for the identified impacts to the sites have been developed based on environmental context and condition, background research and consultation with stakeholders. Measures for mitigating harm to the sites are outlined in Table 7 below.

Table 7. Mitigation measures for impacted Aboriginal sites

Site Name	Archaeological Significance/ Cultural Significance	Impact Assessment	Mitigating harm
RP2J AFT 3	Moderate/ High	Total Impact	Archaeological salvage excavation. Collection of surface artefacts Relevant project approval required prior to commencement of works affecting the site.
RP2J AFT 4	Low/ High	Total Impact	Collection of surface artefacts Relevant project approval required prior to commencement of works affecting the site.
RP2J IF 1	Low/ High	Total Impact	Collection of surface artefacts Relevant project approval required prior to commencement of works affecting the site.
RP2J IF 2	Low/ High	Total Impact	Collection of surface artefacts Relevant project approval required prior to commencement of works affecting the site.

Figure 18. Proposed impact area and Aboriginal heritage

9 Management Outcomes

The following general management outcomes will be implemented in accordance with the mitigation strategy for the proposal as outlined in Chapter 10.

9.1 Mitigation through archaeological salvage excavation

The Aboriginal site in Table 8 is of moderate Aboriginal heritage significance and will be impacted by the project. The site will require archaeological salvage excavation to mitigate the impact. Salvage excavation can only occur after project approval is obtained.

Salvage excavation must be completed prior to any activities which may harm Aboriginal objects at this site location. Salvage excavation activities would be undertaken in accordance with the methodology attached as Appendix D.

Table 8. Aboriginal cultural heritage sites requiring mitigation (salvage excavation)

Archaeological sites requiring mitigation (salvage excavation)	
Archaeological Site (requiring salvage)	RP2J AFT 3

9.2 Mitigation through the collection of surface artefacts

The Aboriginal sites in Table 9 are of high cultural significance and will be impacted by the project. The sites will require the collection of surface artefacts to mitigate the impact. Collection can only occur after project approval is obtained.

The collection must be completed prior to any activities which may harm Aboriginal objects at these site locations. The collection of surface artefacts would be undertaken in accordance with the methodology attached as Appendix D.

Table 9. Aboriginal sites requiring mitigation (collection)

Archaeological sites requiring mitigation (collection)	
Archaeological Sites (requiring the collection of surface artefacts)	RP2J AFT 3, RP2J AFT 4, RP2J IF 1 and RP2J IF 2

10 Management Procedures

10.1 Management Policy for Aboriginal Cultural Heritage

The policy for the management and conservation of Aboriginal heritage in relation to cultural heritage salvage activities and construction activities (or fencing, geotechnical investigations, minor clearing, establishing site compounds, adjustment to services/utilities etc.) is described below:

Responsibility for compliance with Management Policy

1. The Proponent must ensure all of its employees, contractors and subcontractors and agents are made aware of and comply with this management policy.
2. The Proponent must appoint a suitably qualified and experienced environmental manager who is responsible for overseeing the activities related to this management policy.
3. The Proponent must appoint a suitably qualified and experienced Archaeologist who is responsible for overseeing, for and on behalf of the Proponent, the archaeological activities relating to the project.

Operational constraints

4. Where archaeological salvage excavation or surface collection has been nominated for impacted sites, no construction activities (or fencing, geotechnical investigations, minor clearing, establishing site compounds, adjustment to services/utilities etc.) can occur on the lands to be investigated until the relevant archaeological excavation at the nominated site have been completed..
5. Prior to the commencement of early works activity (e.g. fencing, minor clearing, establishing site compounds etc.) a construction heritage site map identifying Aboriginal sites to be excavated and avoided (for all sites in proximity to the project boundary) must be prepared. The construction heritage site map should be prepared to the satisfaction of Roads and Maritime.
6. All employees, contractors, subcontractors and agents carrying out early works activities (e.g. fencing, minor clearing, geotechnical investigations, establishing site compounds etc) must undertake a Project induction (including the distribution of a construction heritage site map) to ensure that they have an understanding and are aware of the Aboriginal heritage issues affecting the activity.

Areas of Aboriginal archaeological sites and objects to be impacted

7. The areas of archaeological sites and objects identified as being impacted by construction activities are listed in Table 6 of this report and are in accordance with the Project Approval.

Human Remains

8. This management policy does not authorise any damage of human remains.
9. If potential human remains are disturbed the Proponent must follow the procedures outlined in section 10.2 below.

Salvage Activities

10. Archaeological salvage excavation where appropriate must be carried out in accordance with the methodology specified in Appendix D and the Project Approval.

Involvement of Aboriginal groups and/or individuals

11. Opportunity may be provided to the registered Aboriginal stakeholders to be involved in the following activities:
    a. assist with the collection of surface artefacts and salvage excavation.

Conservation of salvaged Aboriginal objects

12. Department of Planning and Environment (DP&E), as the approval authority, will be consulted;
13. Aboriginal objects will be transferred in accordance with a Care Agreement or similar agreement to an Aboriginal community;
14. In the event the Aboriginal community is unable to accept the objects, the objects will be transferred to the Australian Museum in accordance with legislative requirements, *Australian Museum Archaeological Collection Deposition Policy v1.0 January 2012;*
15. In the event that neither the Australian Museum nor the Aboriginal community are able to accept the archaeological objects, KNC will work with RAPs and Roads and Maritime to identify a suitable location for reburial following consultation with RAPs and DP&E

Reporting requirements

16. A written archaeological salvage excavation report must be provided to Roads and Maritime within a reasonable time in accordance with the Project Approval following the completion of the archaeological program.

Notification and reporting about incidents that breach this management policy

17. Incident reporting requirements in accordance with the Project Approval is to include Aboriginal heritage.

Procedure for unexpected archaeological finds

18. Roads and Maritime *Unexpected Archaeological Finds Procedure* will be used in the event of uncovering an unexpected archaeological find during Roads and Maritime activities.

10.2 Procedures for Handling Human Remains

- **Note that Project Approvals do not include the destruction of Aboriginal remains**

This section outlines the procedure for handling human remains in accordance with the Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the *Heritage Act 1977* (NSW Heritage Office 1998) and the Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1997). In the event that construction activity reveals possible human skeletal material (remains), the following procedure is to be followed:

1. as soon as remains are exposed, all work is to halt at that location immediately and the Project environmental manager on site is to be immediately notified to allow assessment and management;
    i. stop all activities; and
    ii. secure the site.
2. contact police, the discovery of human remains triggers a process which assumes that they are associated with a crime. The NSW Police retain carriage of the process until such time as the remains are confirmed to be Aboriginal or historic;
3. DP&E, as the approval authority, will be notified when human remains are found;
4. once the police process is complete and if remains are not associated with a contemporary crime contact DP&E. DP&E will determine the process, in consultation with OEH and/or the Heritage Office as appropriate;
    i. if the remains are identified as Aboriginal, the site is to be secured and DP&E and all Aboriginal stakeholders are to be notified in writing. DP&E will act in consultation with OEH as appropriate. OEH will be notified in writing according to DP&E instructions; or
    ii. if the remains are identified as non-Aboriginal (historical) remains, the site is to be secured and the DP&E is to be contacted. DP&E will act in consultation with the Heritage Division as appropriate. The Heritage Division will be notified in writing according to DP&E instructions;
5. once the police process is complete and if the remains are identified as not being human work can recommence once the appropriate clearances have been given.

10.3 Procedure for proposed changes to Approved Projects

Roads and Maritime recognises that during the construction of the project design alterations or other changes to the Approved Project may be required.

A proposed change to the Approved Project (such as an alteration of the current design, the location of ancillary facilities) within the project corridor may result in a:

- Reduced impact to Aboriginal cultural heritage; or an
- Increased impact to Aboriginal cultural heritage.

To ensure consistency with the Approved Project and this document any change in the overall impact on Aboriginal cultural heritage will need to be considered. The process to determine consistency is outlined in section 10.3.1 below.

Where a proposed change to the Approved Project occurs outside of the project boundary considered for the EIS further heritage assessment will be required to determine if there would be an impact on Aboriginal cultural heritage and whether this represents a modification to the Approved Project (outlined below).

10.3.1. Changes in heritage impact

Where the Proponent seeks to make a change to the design and construction of the Approved Project which changes the assessed impact on Aboriginal cultural heritage the Proponent will need to prepare an assessment of the new impacts of this work in consultation with the appointed Archaeologist. The continued involvement of the Aboriginal stakeholders in this process is outlined in section 10.4.

- New impacts consistent with previously identified impacts

If a proposed change to the Approved Project is considered to have a neutral or lesser impact on Aboriginal cultural heritage than that identified in this document it would be considered a consistent impact.

If the proposed change is considered to be consistent with the Approved Project Roads and Maritime may approve the change with no requirements to seek further approval. However, in certain circumstances, further consultation with Aboriginal stakeholders may still be required (see section 10.4 below).

- New impacts inconsistent with previously identified impacts

If a proposed change to the Approved Project is considered to have an increased impact on Aboriginal cultural heritage than that identified in the EIS it would be considered an inconsistent impact.

If the proposed change is considered inconsistent with the assessed impact on Aboriginal cultural heritage, as detailed in the Project Approval, Roads and Maritime would require an amendment to the mitigation measures agreed in this report. If this proposed change is considered inconsistent with the Approved Project Roads and Maritime would require a modification of the Approved Project. Further consultation with Aboriginal stakeholders will be undertaken (see 10.4 below).

10.4 Process for continued consultation with Aboriginal stakeholders

The extent to which Roads and Maritime will continue to consult with Aboriginal stakeholders is dependent upon the level of impact and whether the area was assessed as part of the EIS. The types of potential impacts are identified as reduced impacts, increased impacts or unknown impacts.

a) Reduced or neutral impact
If as a result of alterations to the project design a previously identified impact to an Aboriginal heritage item is reduced or neutral then no further consultation is required.

If as a result of alterations to the project design an impact to an Aboriginal heritage item is proposed that results in a reduced impact on the overall heritage significance of the project area (i.e. the cumulative impact is reduced), then further consultation with Aboriginal stakeholders will be undertaken. This consultation may entail a phone call and phone log of comments received or the provision of a report for comment (10 working days).

b) Increased Impact
Where as a result of alterations to the project design an impact on Aboriginal heritage is considered to be greater than identified by the Approved Project further consultation will be undertaken. This consultation will either entail a phone call and phone log of comments received or the provision of a report for comment (10 working days).

c) Unknown impacts: Assessment process
Where a proposed change is an area located outside of the project boundary assessed as part of the Approved Project the impact on Aboriginal cultural heritage is considered to be unknown. This area would require preliminary assessment to determine any impacts upon Aboriginal heritage. Should no impacts be identified then no consultation with Aboriginal stakeholders is required. Should potential impacts be identified consultation with Aboriginal stakeholders will be undertaken. This consultation will entail the provision of a report for stakeholder comment (10 working days) detailing the impacts and mitigation strategies proposed.

References

Australian Museum Business Services (AMBS), 2005. *Aboriginal Heritage Study: Newcastle Local Government Area*. Report prepared for Newcastle City Council.

Baker Archaeology, 2016. *Newcastle Inner City Bypass – Rankin Park to Jesmond. Technical Paper 9 – Non-Aboriginal Heritage Assessment*. Report for Aurecon Australasia Pty Ltd on behalf of Roads and Maritime Services

Brayshaw and Kerr, 1983. *Archaeological Survey at Rankin Park Hospital, Newcastle, New South Wales*.

Brayshaw and Associates, 1984. *State Highway No 23 – Archaeological Investigation at Lambton Heights, Newcastle NSW*. Report prepared for Cameron McNamara Pty Ltd.

Brayshaw, H., 1987. *Aborigines of the Hunter Valley: A study of Colonial Records*. Scone & Upper Hunter Historical Society.

Dyall, L.K., 1971. Aboriginal Occupation of the Newcastle Coastline. *Hunter Natural History*, vol. 3, no. 3, pp. 154-168.

Dean-Jones, P., 1989. *Report of an Archaeological Survey at Glendale, NSW*. Report prepared for Planning Workshop.

Environmental Resources Management Australia (ERM), 2002. *Intersection of Lookout Road and McCaffrey Drive, New Lambton*. Report prepared for Hyder Consulting.

Fawcett, J. W. "NOTES ON THE CUSTOMS AND DIALECT OF THE WONNAH-RUÁH TRIBE." *Science of man* 1.7 (1898): 152-4.

Grant, J. 1803, *The Narrative of a Voyage of Discovery, Performed in His Majesty's Vessel The Lady Nelson, of Sixty Tons Burthen, with Sliding Keels, In the Years 1800, 1801, and 1802, to New South Wales*. C. Roworth, Bell Yard, Fleet Street London

Gunson, N. (ed) 1974. *Australian reminiscences & papers of L.E. Threlkeld, missionary to the Aborigines, 1824-1859.* Australian Institute of Aboriginal Studies. Canberra.

Hawley, S.P. and Brunton, J.S., 1995. *The Newcastle Coalfield, Notes to Accompany to the 1:100,000 Newcastle Coalfield Regional Geology Map.* Coal and Petroleum Branch, Department of Mineral Resources.

Hiscock, P., 2002. Quantifying the size of artefact assemblages. *Journal of Archaeological Science 29*: 251–258.

Holdaway, S. and Stern, N., 2004. *A Record In Stone: The Study of Australia's Flaked Stone Artefacts*. Aboriginal Studies Press, Canberra.

Kelleher Nightingale Consulting (KNC), 2017, *Newcastle Inner City Bypass – Rankin Park to Jesmond, Aboriginal Archaeological Survey Report - Stage 2 PACHCI*. Report prepared for Roads and Maritime Services

Matthei, L. E, 1995. *Soil Landscapes of the Newcastle 1:100 000 Sheet Report*. Report prepared for Department of Land and Water Conservation, Sydney.

Maynard, J, 2015, *Callaghan, The University of Newcastle: whose traditional land?* The University of Newcastle. Newcastle.

Miller, R., 1886. No. 188 The Hunter River. The Wonnarua Tribe and Language. In Curr, E.M. *The Australian Race: Its Origin, Languages, Customs, Place of Landing in Australia, and the Routes by which it spread itself over that continent*. Melbourne, John Ferres, Government Printer, 1886-1887, Vol. 3. pp. 352 - 357

Nishiizumi, K., Lal, D., Klein, J., Middleton, R. and Arnold J.R. 1986. Production of 10Be and 26Al by cosmic rays in terrestrial quartz in situ and implications for erosion rates. *Nature 319 (6049)*: 134-136.

Nishiizumi, K. et al. 1993. Role of in situ cosmogenic nuclides 10Be and 26Al in the study of diverse geomorphic processes. *Earth Surface Processes and Landforms 18*: 407-425.

Office of Environment and Heritage (OEH) (formerly Department of Environment, Climate Change and Water), 2010a. *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales: Part 6 National Parks and Wildlife Act 1974*. Department of Environment, Climate Change and Water NSW, Sydney.

OEH, 2010b. *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (Part 6 National Parks and Wildlife Act, 1974)*. Department of Environment, Climate Change and Water NSW.

OEH, April 2011. *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*. Office of Environment and Heritage, Department of Premier and Cabinet, Sydney.

Pearson, M. and Sullivan, S. 1995. *Looking After Heritage Places: The Basics of Heritage Planning for Managers, Landowners and Administrators* Melbourne University Press.

Pickett, J.W & Alder, J.D, 1997. *Layers of time: the Blue Mountains and their geology*. New South Wales Department of Mineral Resources, Sydney.

Roads and Maritime Services (Roads and Maritime), November 2011. *Procedure for Aboriginal cultural heritage consultation and investigation*.

Roads and Maritime, July 2012. *Standard Management Procedure: Unexpected Archaeological Finds*. Environment Branch. Roads and Maritime Services, North Sydney

Sullivan, S. and Bowdler, S. 1984. *Site Survey and Significance Assessment in Australian Archaeology*. Canberra: RSPacS, Australian National University.

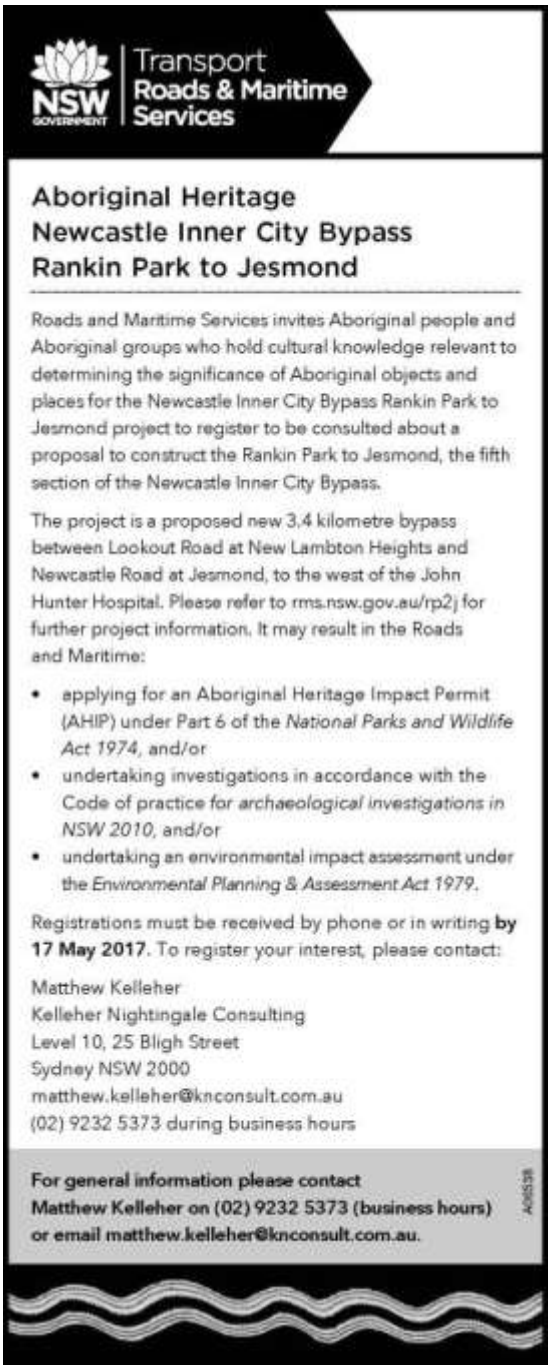
Troedson A.L. & Deyssing L. 2016. *Newcastle-Hunter Area 1:100 000 and 1:25 000, Coastal Quaternary Geology Map Series*. Geological Survey of New South Wales, Maitland.

Umwelt (Australia) Pty Limited (Umwelt), 2002a. *Archaeological Survey of Revised Route for the Proposed New Access Road to John Hunter Hospital, Newcastle, NSW*. Report prepared for Bovis Lend Lease.

Umwelt, 2002b. *Management of Aboriginal Heritage Values in the Blue Gum Vista Estate, Vol 1 & 2*. Report prepared for Landcom.

Umwelt, 2006. *Aboriginal Archaeological Survey and Assessment of the Proposed State Highway 23 Realignment form Rankin Park to Jesmond, NSW: An Examination of Four Alternative Routes*. Report for NSW Roads and Traffic Authority

Appendix A Advertisement for registration of interest



Transport
Roads & Maritime
Services

Aboriginal Heritage
Newcastle Inner City Bypass
Rankin Park to Jesmond

Roads and Maritime Services invites Aboriginal people and Aboriginal groups who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places for the Newcastle Inner City Bypass Rankin Park to Jesmond project to register to be consulted about a proposal to construct the Rankin Park to Jesmond, the fifth section of the Newcastle Inner City Bypass.

The project is a proposed new 3.4 kilometre bypass between Lookout Road at New Lambton Heights and Newcastle Road at Jesmond, to the west of the John Hunter Hospital. Please refer to rms.nsw.gov.au/rp2j for further project information. It may result in the Roads and Maritime:

- applying for an Aboriginal Heritage Impact Permit (AHIP) under Part 6 of the *National Parks and Wildlife Act 1974*, and/or
- undertaking investigations in accordance with the Code of practice for *archaeological investigations in NSW 2010*, and/or
- undertaking an environmental impact assessment under the *Environmental Planning & Assessment Act 1979*.

Registrations must be received by phone or in writing **by 17 May 2017**. To register your interest, please contact:

Matthew Kelleher
Kelleher Nightingale Consulting
Level 10, 25 Bligh Street
Sydney NSW 2000
matthew.kelleher@knconsult.com.au
(02) 9232 5373 during business hours

For general information please contact Matthew Kelleher on (02) 9232 5373 (business hours) or email matthew.kelleher@knconsult.com.au.

A08538

Appeared in: *The Koori Mail* (Wednesday 3 May 2017), National Indigenous Times (Wednesday 3 May 2017), and *Newcastle Herald* (Wednesday 3 May 2017)

Appendix B AFG Meeting Minutes

Kelleher Nightingale Consulting Pty Ltd

MEETING MINUTES

Name of Meeting:	Aboriginal Focus Group Meeting: Newcastle Inner City Bypass, Rankin Park to Jesmond
Location of Meeting:	Silveridge Community Centre, 13 Iranda Grove, Wallsend NSW
Meeting Facilitator:	Matthew Kelleher (KNC)
Date:	22 June 2017
Time:	10:30am - 12:30pm
Attendees:	Arthur C. Fletcher (Kauwul T/A Wonn1), Lynne Fletcher (Kauwul T/A Wonn1), Assiah Issa (RMS), Simon Pearce (GHD), Joanne Box (RMS), Morgan Wilcox (RMS), Deborah Swan (RMS), Warren Steadman (RMS), Cristany Milicich (KNC), Matthew Mate (RMS), Madeline Harding (KNC), Anthony Johnson (Murra Bidgee Mullangari A/B), Matthew Kelleher (KNC)

Meeting Minutes

Meeting commenced 10:40am	
Introduction - Matthew Kelleher (MK):	- Welcome and introductions
Welcome to country/acknowledgement - Arthur C. Fletcher (AF):	- Acknowledgement / welcome to country, one minute silence [standing]
Project Proposal - Matthew Mate (MM):	- Presented an overview of the project, including how it fits into the overall context of the wider Newcastle Inner City Bypass. There are 5 sections (completed between 1983 – 2014) and this project is the fifth stage. - Provided a description of the project corridor and outlined the key objectives and need for the project. - Discussed the assessment framework – the project being assessed using an Environmental Impact Statement (EIS) which will include a number of technical studies including the Cultural Heritage Assessment Report, following the PACHCI Stage 3. - Played visual animation [2mins] of a flyover of the proposed bypass showing the alignment and the proposed interchanges.
AF:	- Questioned potential environmental offsets of the project; specifically for vegetation. Commented that we should replace what vegetation is removed to the same level or above.
MM:	- Confirmed there was a biodiversity offset strategy being prepared as part of the EIS.
Assiah Issa (AI):	- Clarified that the biodiversity offset strategy uses a credit system for replacing vegetation. The process includes identifying how much vegetation is being removed as a result of the project, how much credits these are worth and then identifying a strategy to offset the vegetation loss. - Added that they were in the early stages of this process and still needed to talk to landowners, but confirmed there is a strategy for this.
AF:	- Acknowledged the land ownership issue and noted the difficulty of working with private landowners for these sorts of projects. Noted that he would like to be kept informed of the progress of the offset strategy,
AI:	- Suggested that RMS could send through a copy of the offset strategy to AF.
Archaeological assessment – MK:	- Presented an overview of the Aboriginal Heritage archaeological assessment (PACHCI Stage 2 and survey). - Noted that there had been multiple assessments over the years, the last one was in 2006 and with a slightly different alignment. - Added that previous assessment did not identify any Aboriginal heritage constraints. - Noted that while the project corridor appeared to be intact, there had been some impacts from mining and the presence of a squatter's camp in the northern

	section of the project area. - Discussed four sites and two potential archaeological deposits (PADs) which were identified during the survey. - Noted that the southern section of the project area did not have a lot of archaeological potential due to movement of erosional soils on the slopes and disturbance along tracks. - Discussed the archaeology on the ridgetop and confirmed that the soils in this location were pretty good, fairly intact. - Outcropping sandstone (conglomerate) was also identified but no shelters were found. This was attributed to the presence of the wrong type of sandstone. - Also noted that Aboriginal community representatives out on survey identified the ridgetop as a likely travel corridor.
MK:	- Outlined the location of the old squatter's camp from the Depression Era in the northern portion of the project area. Added that there had been variable disturbance here, with some areas having been stripped completely.
MK:	- Provided overview of identified sites [RP2J AFT 1 & RP2J AFT 2] in the southern portion of the study area. - The first site [RP2J AFT 1] was located on a fire trail, in a disturbed area outside the project area. A piece of silcrete was identified, but the inclusions showed that it probably wasn't from here and had most likely been brought in from gravel mix. - The second site [RP2J AFT 2] was located 30-40 metres outside the project area, on top of the ridge. The site was located in a highly disturbed context where bricks and a dump of fill material were observed. Pieces of silcrete located at this site were also likely dumped here with introduced fill.
MM:	- Noted that this second site was close to, but not within the footprint.
MK:	- Discussed the two PAD areas [RP2J PAD 1 & RP2J PAD 2] identified during the survey. - Confirmed both of these were within the proposed cuts and were identified in a large cleared area, both on crest landforms. Due to the position of these areas in the landscape and the soil profile, they have archaeological potential.
MK:	- Discussed the two archaeological sites [RP2J AFT 3 & RP2J AFT 4] at the northern junction in the project area. - Noted that these were located on the ephemeral channels in a cleared area at a natural junction point in the landscape. These site locations were outside the previous assessment area. - The third site [RP2JA AFT 3] was lower in the landscape and contained some disturbance from dirt bike tracks, but not a high level. Tuff and chert material artefacts were identified; including a broken point and full flake. Suggested that this site demonstrated selective use of raw materials. - The fourth site [RP2J AFT 4] was on a cleared toe-spur projecting out to the junction where the road is planned, also where people would have travelled. The site had been cleared in historic times, possibly for the squatter's camp. The northern part of the site appeared less disturbed. Some disturbance was present, however a silcrete flake was found in situ, stuck in intact soil on the edge of a track.
Deborah Swan (DB):	- Questioned the depth of the intact soil.
MK:	- Confirmed that the soil was not deep, but there was a covering layer and that's why testing was being proposed. - Added that soils around this area have a lot of material such as stone, some glass, rubbish, historic reused redeposited soil. Confirmed that while there are Aboriginal objects here, this particular portion was highly disturbed. - Further down the track there was black humic, recent material and artefacts were present in this type of material. Confirmed that he believed this site to be intact, but we can't really know at this point. - MK confirmed that this site was identified by Aboriginal site officers and that a number of artefacts were identified. Only six in photograph [displayed on screen], however there were two more identified in a grassed clearing off the track. Suggested that whether or not these areas have high levels of archaeology is still to be determined.
MK:	- Discussed next steps in the assessment – included proposed test excavation program and where test pits would be located. Added that sites not in the project area won't be tested.
AF:	- Queried if the sites outside the project area were in danger of being impacted.

	- Added that people use these areas and that bikes and cars travel through these area. - Suggested that there are ways of protecting them such as recording and removing them to a safer area.
MK:	- Confirmed that the artefacts identified outside the project area are not on the tracks but near the edges and were not likely to be impacted by those activities.
AF:	- Suggested that these activities create wider tracks. - Added that he was just raising it as an issue. Adding that it is important to protect these sites whether there is one or one hundred artefacts. They are all connected and tell a story, they might reflect trade routes. - Added that we shouldn't just record and leave them. We should actually put them back in the mud.
MK:	- Added that this was why they were meeting today, to discuss these sorts of potential management options, for example moving them. This is also why we undertake the PACHCI so that management options can be included in the CHAR. However, these are outside the boundary so management options for the sites in the CHAR will need to be confirmed.
AF:	- Added that because they are associated with the project area, that's why they are being discussed. They are all connected by trade routes.
DS:	- Queried whether they would be impacted by ancillary works and construction etc.
MK:	- Advised that the stage three assessment would look directly at all the impacts, including ancillary works.
AF:	- Queried how much of the project footprint would impact creek lines and watercourses. Wanted to know how many creek lines are going to be impacted.
MK:	- Confirmed there were a lot of creek lines as the project is up high in the catchment and therefore contained a good dozen feeders. The biggest ones are down at the junction point towards the north. The drainage system crosses west to east. Another system flows adjacent to the western boundary in the north, lots of places where creeks cross the alignment. - The only archaeologically sensitive ones are in the northern portion. - Confirmed that they have looked for sandstone grinding grooves at the southern end, the high end, and no sandstone grooves were identified anywhere.
AF:	- Added that he would prefer that creek lines were rehabilitated in an environmentally friendly way and not hard engineering solutions. - Suggested that the area floods quite easily, and that we don't want to add to that.
MM:	- Suggested there are structures to keep creek lines open. In regards to the rehab situation, a quite detailed environment assessment is taking place.
Simon Pearce (SP):	- Added that there is a section of the creek which requires realignment. Received feedback from council and primary industries and RMS were committed to looking after it, not just using concrete.
AF:	- Indicated he would be happy with rocks and creek reeds.
MM:	- Added that there was information available on the website. Suggested that he could send AF an image of the proposed creek line to be realigned.
Anthony Johnson (AJ):	- Queried how many pits would be dug and where the artefacts would go.
MK:	- Suggested that if there is no further testing required, then they would be salvaged under the planning requirements (conditions of approval). - During the testing program, MK recommended that artefacts are not reburied too early, as it is better to keep them in a group and to be kept in a safe place out of the ground until further decisions are made. Any artefacts found during testing will be taken to the lab until a decision is made about management options. This decision will be through discussion with the community. - Added that requirements would be followed for handling objects and that they would definitely consult about the artefacts in the future. - In regards to the number of pits, it is a test excavation so it is less about the number of artefacts and more about the information gathered. Suggested that they are looking at around 30 pits, but this will vary depending on the information produced.

AF:	- Suggested that it was important to him that we have Aboriginal people out there in the field to voice any potential concerns. Added that we need to have a fair hearing for any concerns raised. - Wanted to know the percentage of ground exposure or ground cover? Suggested that if it was 1% exposure, then that is not that great. - Added that the environment is different today. Trees have been cut down since traditional times. A lot of that wasn't there because of our own cultural land management. What we see today is not what it was, but some of the species may remain.
AJ:	- Queried if there were mines in the area.
MK:	- Confirmed they didn't see any evidence of mines during survey and added that he didn't think mining had impacted on the Aboriginal archaeology.
SP:	- Added that it is mostly underground mining, no one has found any real evidence of shafts, mining was mostly confined to the western part of the area. Some slumping has been noted in the area, probably related to shovel mining. Some of the fill around may come from mining.
AF:	- Suggested that it could have been honeycomb mining, like what is known in Newcastle and Lake Macquarie. Agreed there was likely not much of an effect on Aboriginal heritage.
SP:	- Added that there was anecdotal evidence of illegal digging at outcrops in the north end.
MK:	- Added that some of this northern end was quite disturbed, but it was hard to tell at this point in time, especially around the shanty town.
AF:	- Added that homes in the area or in the shanty town would have needed heating sources, people living there would have done what they had to do.
MM:	- Demonstrated the likely mining areas on the map [on screen]. Known areas are 60-150 metres deep, deeper in the southern part of the study area and coming up closer to the surface in the north.
MK:	- Added that the creek channel in the northern section is quite pronounced and unusual. He believed it has been modified by shanty town occupiers.
AF:	- Questioned whether there was an apology list for the AFG. Queried where the rest of the registered stakeholders were. He wanted to hear their voices and thoughts too, it's not ideal just to hear from the archaeologists or one or two other people. - Added he had not been out to the land himself so it is hard for him to make comment when he hadn't been out there.
MK:	- Advised the land is publically accessible so can access it to have a look with no problems. - Added that the Local Aboriginal Land Council and relevant Native Title group were both involved in the survey and they had been out there.
DS:	- Wanted to know how many registered.
MK:	- Confirmed we have 17 registered stakeholders.
AF:	- Added it was important for continuity that people are there for the whole program, not just bits and pieces. So they have the whole story and can share what they have felt and seen. Said they could take that on board or not.
MK:	- Acknowledged, that is something they definitely would take on board. Added that this was a frequent comment at AFGs and needs to be said.
AF:	- Thank you and noted.
AJ:	- Added that there is an issue around getting people out on site. Suggested that they go through everything at these meetings.
MK:	- Responded that there is participation on all different levels. It depends on the size of the project. Not always possible for everyone to participate in survey, logistics can be difficult and people are not available. - Added that where there is follow-on work such as testing or salvage excavations, they try to be as equitable as possible and make sure things are fair. - Encouraged everyone to apply as site officers for the project. - Reiterated that Site Officer Application forms were available and due on the 6th July. - Stated that the overall program would be two weeks long, looking at four groups/people per week. Added there was opportunity for 8 groups to take part in the test program.
AF:	- Suggested he believed it was better from a cultural perspective to share the work out evenly. Even if the time for each group is short (e.g. 2 days each) at least that

	way it is fair and everyone has a chance to be involved in the fieldwork rather than just giving comments. And then if it goes longer the groups could go through again. Added that there is that importance of the physical and spiritual connection, so that they get true involvement in the project, rather than just rubber-stamping. - Added that it was important not to just be ticking boxes, but to be a part of the project. It was not just about the 21 days to comment, etcetera. It is reinforced with groups, that they are not just used as rubber stamps.
AJ:	- Reiterated the importance of involvement especially for the fieldwork. It is important that young Aboriginal voices get to have a chance, to have a go, it is annoying when we can't get employed to train these boys for the cultural heritage work.
MK:	- Added that it was important to get the applications in for site officers, he strongly encouraged this. - Suggested that what they have covered so far is archaeological but there is the cultural component and that is important too; the cultural component comes from the community. - Added that if they had any cultural information that they were willing to share or if they knew of elders/ knowledge holders for the project area, to please get in touch with, or get these people to get in touch. If there is any information about the cultural component of this area the project team would be looking for specific information for the project area.
Warren Steadman (WS):	- Wanted to know if they would be doing a cultural report.
MK:	- Confirmed that if it is warranted, yes. A CHAR would be prepared, however, there are a number of possible outcomes.
DS:	- Wanted to know if the tree in the roundabout will be removed and if there had been any cultural issues around the tree.
SP:	- Suggested that no heritage had been identified in association with that tree.
MM:	- Added it was planted in 1993.
DS:	- Suggested it seemed a lot older than 1993.
SP:	- Reconfirmed there was nothing to suggest there is any heritage associated with the tree.
AJ:	- Queried if they had found any scarred trees.
MK:	- Suggested that they did have a good look around, but none were identified. They often find scarred trees where there is a 'decision-making' point in the landscape about which way to go or what is around the area. They see this both with Aboriginal scarred trees and with historic survey blazed trees that have been marked by Europeans. Where they were, up on the ridge, it is logical which way people were moving so they did not expect to find scarred trees as people know what they are doing up there and where they are going. Added that they didn't identify any historic or Aboriginal scarred trees in the survey area.
AF:	- Suggested that if there were any up there, they have probably been taken out, they are often the first ones to be removed.
MK:	- Called for further questions or comments. - No further questions or comments from the floor.
Meeting concluded 12:00pm	

Kelleher Nightingale Consulting Pty Ltd

MEETING MINUTES

Name of Meeting:	Aboriginal Focus Group Meeting 2: Newcastle Inner City Bypass, Rankin Park to Jesmond
Location of Meeting:	Silveridge Community Centre, 13 Iranda Grove, Wallsend NSW 2287
Meeting Facilitator:	Matthew Kelleher (KNC)
Date:	5 October 2017
Time:	10:30am - 12:30pm
Attendees:	Deborah Swan (RMS) Arthur C. Fletcher (Kauwul T/A Wonn1), Kerrie Brauer (ATOAC), Tanya Laughton (DNC), David Ahoy (LHAI), Brad Spalding (RMS), Stuart Pigott (RMS), Matthew Mate (RMS), Joanne Box (RMS), Rob Russell (ALALC) Kathie Steward Kinchela (YCS), Matthew Kelleher (KNC) Madeline Harding (KNC)
Apologies:	**Peter Leven, Tracey Howie, Luke Hickey**

Meeting Minutes

Meeting commenced 10:40am	
Introduction – Deborah Swan (DS):	- Welcome and introductions
Welcome to country/acknowledgement – Kerrie Brauer (KB):	- Acknowledgement / welcome to country
Project Proposal - Matthew Mate (MM):	- Presented an overview of the project, including how it fits into the overall context of the wider Newcastle Inner City Bypass. There are 5 sections (completed between 1983 – 2014) and this project is the fifth stage. - Provided a description of the project corridor and outlined the key objectives for the project. - Discussed the assessment framework – the project being assessed using an Environmental Impact Statement (EIS) which will include a number of technical studies including the Cultural Heritage Assessment Report, following the PACHCI Stage 3. - Discussed design changes to the half interchange at the hospital, to make it a full interchange.
Arthur Fletcher (AF):	- Questioned the maximum width of disturbance that the project would have on the environment.
Brad Spalding (BS):	- Responded that the maximum width is near the hospital interchange and is approximately 200 metres.
Rob Russell (RR):	- Questioned when the estimated completion date would be.
Matthew Mate (MM):	- Responded that Roads and Maritime was expecting project approvals by end of 2018 with construction to begin in 2019-2020. The estimated completion date would be 2023.
RR:	- Requested a copy of the project proposal presentation.
Kerrie Brauer (KB):	- Responded that it would be great if attendees could all receive a copy.
MM	- It was agreed that a copy of the presentation would be provided to attendees.
Archaeological assessment – Matthew Kelleher:	- Brief overview of the assessment process to date which included an overview of four sites and two PADs (potential archaeological deposit) RP2J AFT 1, RP2J AFT 2, RP2J AFT 3, RP2J AFT4 and RP2J PAD 1 & RP2J PAD 2 identified in the PACHCI Stage 2 survey undertaken in March 2017. - Test excavation was then undertaken to inform the project and the archaeology as well as to determine potential impacts prior to construction. - A brief description of the landscape was provided – the landscape is an urban bushland environment located along a ridgeline feature. The project area was not pristine but had been less impacted by disturbance than surrounding urban areas. - The four sites (RP2J AFT 1, RP2J AFT 2, RP2J AFT 3 & RP2J AFT4) were detailed while a flyover of the site was shown on the projector. - Two of the sites [RP2J AFT 1 & RP2J AFT 2] were isolated finds outside of the project boundaries and not to be impacted by the proposed. These isolated finds

	were not subject to test excavation and remain near existing access tracks in the bushland area adjacent to the project. - Two PADs [RP2J PAD 1 & RP2J PAD 2] contained archaeology but were disturbed. - The last two sites [RP2J AFT 3 & RP2J AFT 4] were also disturbed, mostly due to Hollywood, the shanty town which used to exist at the northern end of the study area.
AF:	- Questioned whether the depth of the soils at the shanty town sites had been tested at all.
MK:	- Responded that some soil tests had been down at the shanty town area to determine the soil depth, however not across the entire area. - Stated that the soils are not that deep and what is left has been modified.
MK:	- Discussed the landscape of RP2J AFT 4 and the location of RP2J AFT 3 at the junction of two minor ephemeral waterways, which would have been an area people traversed.
AF:	- Stated that people could have walked through this area for cultural reasons.
MK:	- Responded that according to the results of the test excavation, the location of RP2J AFT 3 was definitely used, but not intensively occupied.
MK:	- Discussed how the geology has influenced the soils at these sites. There has been a slight decline in soils, however cultural activity is still present on top.
AF:	- Questioned whether we had any areas where the artefacts have come down the slope and collected over time.
MK:	- Responded that site RP2J AFT 3 was the most intact site due to a capping present at the site, a blanketing effect had capped what had previously been brought here through erosion processes.
MK:	- Discussed the methodology of the test excavation which included a number of test pit transects, roughly a total of about 40 across four sites. Each measuring 50x50cm as per OEH guidelines.
MK:	- Discussed the findings at site RP2J AFT 3. Three artefacts were identified during the survey and approximately a dozen in the test program, which produced enough information to predict what could be found at this site. - Stated there was a slow moving erosion process occurring at this site which led to some disturbance; however artefacts did remain within the site, just not in an intact context. - Indicated that this site had the most intact soils we found in the overall study area and that these soils were pretty exceptional considering the surrounding urban landscape. - One example of an artefact identified at RP2J AFT 3 was a piece of silcrete with large inclusions. - Indicated that this material was not sourced from this site, but had been transported from around the area.
AF:	- Questioned at which depths these artefacts had been recovered from
MK:	- Responded that these artefacts were mostly occurring in the 15-20cm depths, however the soil profile indicated a single unit meaning that the soils are not stratified and artefact deposition was not reflective of soil deposition. - Suggested that the soil profile has shifted down the slopes overtime, with the top soils being more recent, probably from the last 200 years.
AF:	- Questoned if we would test the soil as it was important to him and others.
MK:	- Responded that the topsoil would likely be no older than 1500-3500 years and that we would be testing soils during the recommended post approval salvage excavation. - Suggested that site AFT3 was the most intact site, with the most artefacts and the most potential to yield further archaeological information. - The remaining sites had all been disturbed.
MK:	- Added a series of test pits were also dug at site RP2J AFT 4. This site had the highest number of artefacts identified during the Stage 2 survey. Not as many were identified during the testing program. - This site also contained natural soils within the lower sections of the pit. Top soils had been disturbed by clay inclusions from historic cuttings likely associated with the shanty town.
MK:	- Added that while we have artefacts from this site, no more information can be gathered from this site, as anything that was once there has been stripped away with the soils.

MK:	- Added that the two PAD areas [RP2J PAD 1 & RP2J PAD 2] in the central part of the study area, only one artefact came out of each. - Added that people would have come through these areas, at the highpoint of the ridge.
Tanya Loughton (TL):	- Questioned if this (referring photo showing burnt vegetation in the presentation) would be the result of cultural burning or bushfire.
KB:	- Responded that this would be bushfire
BS:	- Stated that land owners with assistance from NSW Fire & Rescue undertake controlled burns in the area as part of bush fire management. A recent burn was undertaken in the southern part of the bushland corridor. Uncontrolled bush fire outbreaks (possibly arson) have occurred in the past but this appears to have declined in recent years.
MK:	- Added the trees (referring to photo showing burnt vegetation in the presentation) here can be a bit misleading in terms of identifying age.
MK:	- Discussed the role of natural disturbances from geological movement and its impacts on soil distribution within the PAD areas.
MK:	- Added that archaeological material that was once here has likely been moved in association with erosion.
DS:	- Questioned whether any mining had taken place here.
MK:	- Responded that mining had occurred within the study area. RMS also confirmed that mining had taken place within the study area.
Stuart Pigott (SP):	- Confirmed that underneath PAD (AFT4) was a perched aquifer, which has had an effect on the soil and geology in the study area.
MK:	- Added that the tuff artefact was found in a test pit which retained the best structure. - The sandstone capping had also started to come about faster than anticipated at the site located closest to the hospital. - Another tuff piece was also identified within the pad area located closest to the hospital, which had identified a couple on the surface.
MK	- Stated that the best site identified through the program so far had been the RP2J AFT 3 site at the junction of two ephemeral creek lines. - The site was unusual for a metropolitan area and provided a good selection of materials. - RP2J AFT 3 demonstrated a higher value, archaeologically. - Stated that the remaining areas would be of lower archaeological value. - Indicated that RP2J AFT 3 had been recommended for salvage as the proposed works include a basin at this location and the site would be impacted.
KB:	- Questioned how many artefacts were identified from the test pits.
MK	- Responded that 16 artefacts had been recovered overall.
KB:	- Questioned how many test pits were dug overall.
MK:	- Responded that the number was about 40.
AF:	- Questioned whether there were any other sites of cultural value (e.g. stone formations on high areas) which had been identified.
MK:	- Responded by highlighting that there was some non-significant and highly visible sandstone benching on some slopes. Rock benching and outcrops were checked on the Stage 2 site survey, however conglomerate formations were more common and present a low likelihood of archaeological record. - The survey also checked for sandstone boulders, however none were found that would support an archaeological record.
AF:	- Stated that he was also concerned about the impacts of vibrations associated with construction would have on potential sites, such as these boulders that might not strictly be within the project area boundary.
MK:	- Responded that as the surrounding area has been developed for urban uses, there is a low likelihood of surrounding sites that would be susceptible to vibration impacts. Added that there were also no grinding grooves on the ridge but there were some present in lower areas outside the study area in Blackbutt Reserve.
AF:	- Stated he would like some time to discuss the project with other community members in private during the meeting.
TL:	- Questioned if there was going to be further test excavation.
MK:	- Responded that a recommendation of the Cultural Heritage Report is that further investigation of ART3 should be completed after project approval and before construction starts in that area. This is recommended as the suite may hold further scientific potential. This may occur between 1-2 years in the future.

AF:	- Questioned if there would be any ecological offsets for the loss of country for community.
SP:	- Responded that biodiversity offsets would be, in alignment with the state legislation (NSW Biodiversity Offset Policy for Major Projects).
AF:	- Stated that he thinks this is the wrong approach as Aboriginal people should be involved in that process.
KB:	- Stated that she was in agreement.
RR:	- Stated the importance of Aboriginal people's involvement in decision-making, not just government institutions making decisions for Aboriginal people.
SP:	- Responded that in this case, RMS offsetting is currently focused on biodiversity offsets. Specific offsets had not been decided upon yet.
KB:	- Questioned if there were conservation areas in the project area.
MK:	- Responded that no heritage conservation areas in the project area.
KB:	- Questioned if the recommendations for the whole project area was, from an archaeological, not cultural perspective.
MK:	- Responded that it he is always careful to specify that he is coming from an archaeological perspective. MK highlighted that RMS relies on the RAPs provide advice on the cultural of social values of the site of the specific site. He stated that KNC would be recommending additional salvage for RP2J AFT 3 and that no further information could be gained from the other sites. - Added that these recommendations along with community comments would be included in the draft CHAR. This report would then go to Roads and Maritime, for inclusion in the EIS. The Department of Planning and Environment determine the project. - Pending review and approvals, these recommendations would be implemented.
Kathie Steward Kinchela (KSK):	- Questioned if there was a report on the flora and fauna available.
MK:	- Responded that this report was available online in the projects EIS and can be found on the Department of Planning and Environment website.
AF:	- Stated that just because you can't see any artefacts, that this doesn't mean that it doesn't exist, it didn't matter if it was 1, 2, 200 or 20,000 artefacts, everything is connected. - Specified that it was important that the Elders' knowledge is respected.
KB:	- Added that it might be good to present the report in a format that separates the recommendations from community from the archaeologist recommendations so that community comments are read separately from the archaeologists' scientific recommendations. - Added that often Aboriginal community comments get lost in these reports.
MK:	- Responded that it would have to be in line with the SEARS format, and would normally have these integrated in the executive summary at the start of the report and also in the conclusion section at the end of the report. - Hopefully the community and archaeological recommendations are mostly in alignment and can be integrated together.
KB:	- Stated that normally the recommendations are just at the end, it's important that they are seen as separate Aboriginal community comments and that they are included in the front of the report.
KSK:	- Added that it is important that community has an input.
MK:	- Responded agreement, and stated that we would work with community and ensure that the communities' comments are included into the report. Where the comments are suitable, they can be included in the recommendations.
SP:	- Suggested that this is why RMS do the consultation process, so that everyone has their chance to have a say
MK:	- Added that OEH and RMS do consider these comments carefully. - All comments, whether endorsed by Roads and Maritime or not, will be included in the final report.
DS:	Added that it is important to provide written comments so that they can be included in the report.
MK:	- Added that KNC would accept recommendations through any form of communication whether that be through phone conversations, emails or letters.
KSK:	- Stated that it is about input, about best outcomes both culturally and scientifically.
KB:	- Questioned whether there could be more targeted communication when a project cultural requirement is pending, so that deadlines are not missed.

MK:	- Responded that we have to follow the requirements of the PACHCI and OEH consultation guidelines but email reminders could be sent in the future outside of this process to remind people.
KB:	- Suggested that maybe a week before, a call or email could be sent.
David Ahoy (DA):	- Added that at least something needed to be done, as he had missed out as he missed the deadline due to his brother's passing. - Added that in cases like these exceptions should be made.
MK:	- Called for further questions or comments. - No further questions or comments from the floor.
Meeting concluded 12:00pm	

Appendix C Aboriginal Stakeholder Comments

Ben Anderson

From: Awabakal <culture@awabakallalc.com.au>
Sent: Thursday, 26 October 2017 1:19 PM
To: SWAN Deborah
Cc: CEO
Subject: RE: RP2J - PACHCI 3 - Comments on the draft CHAR

Hi Deb,

Rob Russell (ALALC CEO) has advised that he will be writing a response in relation to the PACHI 3 project.

I have to be open & honest here and with all due respect to you, I find it hard for Awabakal Local Aboriginal Land Council (ALALC) to make comment or give recommendations to the draft CHAR for Stage 3 – Rankin Park to Jesmond project on something we were not involved with, due to not being engaged for the field work required within our own LALC boundary. ALALC also find it very disrespectful (I'm not directing this at you either Deb, but rather the proponent, as there are "Guidelines for Consultation processes for proponents" which I will advise of below) that Wonnaruah groups were engaged to conduct field work in an area they know absolutely nothing about, that they have no cultural and or social and or spiritual connection/association to or with on any level.

As " Registered Native Title Applicants" in their own area (the hunter valley) and Wonnaruah people in general, their interest area lies is within their own claim area/tribal area and not outside of it, certainly not in Newcastle – Awabakal country!

To be true to myself and to the Culture & Heritage in this area, the only comments I can make on behalf of ALALC is:

Under the Aboriginal Land Rights Act 1983, section 52.4 ALALC has the following functions in relation to Aboriginal culture and heritage:

(a) to take action to protect the culture and heritage of Aboriginal persons in the Council's area, subject to any other law,

(b) to promote awareness in the community of the culture and heritage of Aboriginal persons in the Council's area.

With regard to ALALC's administrative functions, it is in the best interest/s of ALALC, Its members and the wider Aboriginal Community for proponents to not engage outside parties that have; no interest, have no social or spiritual or cultural connection/association to the Newcastle area and its Culture & Heritage.

For the information of the proponent, I refer to section 3.2, Part 6 of the National Parks and Wildlife Act 1974 "Guidelines for Aboriginal cultural heritage consultation requirements for proponents 2010". (The relevant part/s I am advising of are in **BOLD)**

- 3.2 The objective of consultation
  The objective of community consultation is to ensure that Aboriginal people have the opportunity to improve assessment outcomes by: **• providing relevant information about the cultural significance and values of the Aboriginal object(s) and/or place(s) • influencing the design of the method to assess cultural and scientific significance of Aboriginal object(s) and/or place(s) • actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal object(s) and/or place(s) within the proposed project area • commenting on draft assessment reports before they are submitted by the proponent to DECCW.**

From my experience being the Culture & Heritage Officer here at Awabakal LALC for over the last 6 years, I quote from above, that these groups do not provide the following:

1

- "providing relevant information about the cultural significance and values of the Aboriginal object(s) and/or place(s)" and
- "influencing the design of the method to assess cultural scientific significance of Aboriginal object(s) and/or place(s)" and
- " actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal object(s) and/or place(s) within the proposed project area" and
- "commenting on draft assessment reports before they are submitted by the proponent to OEH (Formerly DECCW).

They have NO care factor for the protection, conservation and preservation of Aboriginal Culture & Heritage in the Newcastle area. All they see it as, is going to work, getting paid for the day and nothing more.

I also refer to 3.3, Part 6 of the National Parks and Wildlife Act 1974 "Guidelines for Aboriginal cultural heritage consultation requirements for proponents 2010".
(The relevant part/s I am advising of are in **BOLD)**

- 3.3 Information required for decision making
  The AHIP application and determination process requires an assessment (by the proponent) and evaluation (by DECCW) of the Aboriginal heritage values of Aboriginal object(s) and place(s) potentially harmed by an activity. **Proponents must provide the opportunity for Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places as relevant to the proposed project area to be involved in consultation.** The information provided through this process will assist DECCW to assess the cultural significance of objects and places that are the subject of an application to damage or destroy an Aboriginal object or place.

Again, from my experience being the Culture & Heritage Officer here at Awabakal LALC for over the last 6 years, I quote from above, that these groups do not **hold the cultural knowledge relevant to determining the significance of Aboriginal object(s) and/or place(s) as relevant to the proposed project area to be involved in consultation,** due to them not having a social, spiritual or cultural connection to the Newcastle area;

As mentioned continuously throughout my response, In the view of ALALC its members and the wider Aboriginal community, these Wonnaruah/Wannarua/Wannaruah groups cannot provide the required relevant information, as they do not have a connection to Awabakal country and have zero knowledge of the Culture & Heritage within it.

Which brings me back to asking why were these Wonnaruah groups engaged in the first place? Not one local Newcastle group that has been conducting site surveys and or assessments in Newcastle for years were engaged for this field work, yet 5 Wonnarauh groups were. How does a that happen? What was the thought process behind this? When ALALC and the local Traditional Owner groups were involved from the start.

I look forward to a reply.

Kind Regards

Pete Townsend
Culture & Heritage Officer

2

A W A B A K A L & G U R I N G A I

30 October 2017

Kelleher Nightingale Consulting Pty Ltd
Archaeological and Heritage Management
Attn: Mathew Kelleher
Level 10, 25 Bligh St
SYDNEY NSW 2000

Dear Mathew,

Re: Review and Response Regarding the Draft Aboriginal Cultural Heritage Assessment Report Regarding the Rankin Park to Jesmond Newcastle Inner City Bypass Project

With regard to the Draft Aboriginal Cultural Heritage Assessment Report Regarding the Rankin Park to Jesmond Newcastle Inner City Bypass Project, we recognise the evaluation by Kelleher Nightingale Consulting which appears to be reasonably comprehensive and herein provide our response regarding our comments and concerns.

Statement of Significance by the Awabakal and Guringai Peoples:

The Awabakal and Guringai is one of the 600 or more language groups or 'nations' that existed across Australia at the time of European contact and are part of the oldest and continuous living culture in human history. The Awabakal and Guringai presence within the Newcastle Region extends from the present day back many thousands of years and is reflected in both tangible and intangible aspects of Aboriginal culture and history. Past survey and assessment within the Newcastle Region has identified Aboriginal Cultural Heritage Sites (the tangible evidence of occupation) and landscape features of cultural value embedded within a landscape that provided physical and spiritual sustenance (often intangible aspects) to the Awabakal and Guringai and those Aboriginal People they invited into their Country.

The Awabakal and Guringai people also have a continuing, contemporary history of trying to protect and preserve the Newcastle Region. They maintain concerns over Development licences being approved in the region and the adverse impacts this has on their cultural values and landscape features and footprints of their ancestors which are being impacted through cumulative and overlapping development activity and unmonitored and unmanaged human recreational activity.

1

As indicated by the statements provided by the Awabakal and Guringai peoples within the document, the mental, physical and spiritual wellbeing of the Awabakal and Guringai People and those Aboriginal Peoples that feel a connection to this landscape is a contemporary phenomenon and not just 'a thing of the past'.

The Newcastle Region contains a plethora of registered Aboriginal cultural heritage sites identified as having Aboriginal cultural value and significance. The sites and landscape features link contemporary Awabakal and Guringai People with generations of their ancestors and are extremely important teaching places and places of spiritual renewal.

Although the impact of European invasion dramatically changed Aboriginal life in Australia forever, the recent history of the Newcastle Region is also characterised by the cultural resilience of Aboriginal Peoples, for both those who have retained connection to Country and those that are reconnecting to Country. Recent history is also characterised by the movement of other Aboriginal Peoples into the Country of the Awabakal and Guringai and the development of their own more recent attachments to the area. Whilst a diversity of attachment and experience is recognised, it is also recognised that the landscape, vegetation and watercourses of the Newcastle Region form part of an Aboriginal cultural landscape of traditional and contemporary cultural and spiritual value to many Aboriginal People.

Aboriginal lore requires that the Aboriginal cultural landscape (which includes Aboriginal heritage sites, landscape features of cultural value, the plants, animals and water) of the Newcastle Region is cared for so that it will survive for future generations of our Peoples.

The custodial rights and obligations of Aboriginal people for Caring for Country underpin the principles of this document. It is highlighted, however, that the Awabakal and Guringai peoples in no way support any impact to Aboriginal sites, landscape features of Aboriginal cultural value or any aspect of the natural environment within the Newcastle Region. Aboriginal people inherit the right and obligation to Care for Country, and endorsing any form of harm is assessed as culturally and ethically inappropriate." (Awabakal Traditional Owners Aboriginal Corporation, Awabakal Descendants Traditional Owners Aboriginal Corporation and Guringai Tribal Link Aboriginal Corporation March 2010) © 2010.

With regard to section 2.2 on page 6, we are wondering why this Draft Report would use the reference stating that; *'The shelters used by the Wonarua were constructed by placing bark sheeting ...'*, as the painting by Joseph Lycett in Plate 1 depicts the Awabakal and Guringai Peoples. Therefore, our Elders believe that this and/or any reference regarding the Wonnarua needs to be removed, as it would seem to be superfluous.

With regards to section 5, Table 4, our Elders would like to comment on the amount of *'Out of Country'* RAP's registering for this Project, and remind everyone that this is about Awabakal and Guringai Culture and Heritage, not just another job opportunity as some RAP's see it. Cultural Knowledge and Connection to Country is the fundamental reason for being consulted regarding these projects.

This is outlined in "*Aboriginal cultural heritage consultation requirements for proponents 2010*", and we sincerely question some RAP's Knowledge and Connection, and hope that

2

RMS do the same. In short this is causing Community unrest and raising tensions as a result. Ultimately this leads to a watering down of serious input into the discussions and actions regarding the Culture and Heritage of this Project.

This area, as well as all of the rest of our Traditional Country, is of great significance and important to us as Awabakal, as it has been part of the greater area that has provided for and shaped the beliefs and cultural practices of our People for thousands of years. All of these areas have and still play a major role in the lives of our People for many and varied reasons that draw us to focus on what it is to be an Awabakal and Guringai people.

This area has not just a physical presence within the Cultural Heritage of the Awabakal and Guringai People, but it is part of our oral history and a place of spiritual significance. The landforms and resources of this locale fulfilled not just the basic needs that underpinned our Peoples subsistence but also satisfied the many other aspects that made up what can be described here as being part of the Cultural foundations of our People.

As already previously stated, this area is of high significance to our People and therefore it would be expected that after the many generations of our People that have walked the pathways of their Ancestors, it is obvious that there would be many areas that contain evidence of this connection, resulting from occupation on varying levels.

There are physical reminders left by our Ancestors which provide us as Descendants of the Awabakal and Guringai Peoples an opportunity to make a physical connection through time with our Ancestors. This connection is one of those avenues that produce in us the sense of perception, appreciation, familiarity and recognition of who we are and where we belong as Awabakal Guringai People, which is our birthright.

Therefore the Cultural Value and Significance remains high, which is attributed to our Cultural Heritage understanding of the connectivity and aspects of the regions holistic perspectives, thus emphasizing the importance of the whole, instead of a Scientific/Archaeological Value aspect of the independence of its site specific parts.

With regards to section 7.2, our Elders are concerned that the emphasis is being directed to only 4 sites being an archaeological/ scientific perspective with a low archaeological significance. The Cultural Heritage aspects of our landscape are seem as a holistic perspective as mentioned above, therefore we cannot separate sections of the project area to be more important than others, each site is connected to the other.

It has been our experience that Archeologists seem to continue to dismiss the potential of additional Cultural Heritage being present within an area without documented evidence to the contrary. There has been many examples of this aspect throughout the wider Newcastle region where archaeologists have underestimated the amount of Cultural Material that is still present below the "ground surface" or "disturbed context", and therefore consequently proposed recommendations of managing our Cultural Heritage

3

are extremely misleading, and limited, in the protection of Aboriginal Cultural Heritage, significance, artefacts/objects and Values.
The continued destruction of our Cultural Heritage and Values is demonstrated by the common expressions such as; disturbed areas, isolated finds, contains fill, no visible Aboriginal object and common sites etc, which are used to devalue the project area of our Cultural Heritage, Values and rights to Care for our Land and Sea Country.

Therefore our Elders believe that it is essential that we are given the opportunity to view the areas after tree removal, so that we are able to collect any visible artefacts for their protection and conservation.

Our Elders concerns are based on our many yeas of experience with the progression of continued destruction of our Cultural Heritage and Values within the Newcastle Region, in which other developments and programs have also been aimed to boost the economic activity to reinforce the city's role within the 21st century. This continued activity has progressed for all who live in Newcastle, however the cost of the continued destruction of our Cultural Heritage and Values has been destroyed at an alarming rate.

With regards to section 8.2, on page 33, which states that; "*The spatial extent, presence of archaeological deposits and activities related to Aboriginal occupation at archaeological sites in the surrounding area are not yet fully understood due to limited archaeological investigations*" , and if this is the case then the statement saying that: "*the project offers an opportunity to advance the interpretation and management of Aboriginal heritage of the surrounding area by contributing to the baseline of information*", our Elders believe that this outcome seems to be based on a scientific archaeological perspective. Therefore, our Elders believe that a preferred cultural perspective needs to be also taken into consideration if we are to achieve appropriate mitigation and management outcomes that are recommended in section 9 on page 35.

Therefore our Elders believe that the salvage and collection of our Cultural Heritage is paramount, and needs to be included within the Project Approval by the Department of Planning. We are also concerned with the wording of the proposed salvage, and believe that the words Cultural Heritage should also be included, not just an archaeological perspective.

With regards to section 10 on page 36-37, our Elders highly recommend that all staff, project manager and contractors need to undertake Cultural Heritage Awareness Training, either through an Oral and/or PowerPoint presentation by the Awabakal and Guringai peoples, as this type of approach would resolve any difficulties for the RMS staff, project manager and contractors involved, to be aware of, and may also assist to recognise Cultural Heritage material for this project.

We also suggest that a poster be hung on the site shed for staff, project manager and contractors as a visual reminder, which would reiterate the aspects of the Cultural Heritage Awareness Training. The poster should consist of information delivered in the

Cultural Heritage Awareness Training that includes, 'what am I looking for', 'what do I do if I find something' and 'what does the Law say'. The poster should also include pictures of examples of what they may encounter. The Awabakal and Guringai representatives can show RMS an example, as we have previously assisted other projects of this important aspect.

With regards to the proposed conservation of salvaged Aboriginal objects outlined in item numbers 12-15 on page 36, our Elders do not support and/or agree with the items listed. our Elders find it highly offensive that discussions regarding the conservation of OUR Cultural Heritage was not disclosed previously. Therefore, we prefer that OUR Cultural Heritage objects/artefacts remain on country in a protected conservation area to avoid further and/or future impacts. The Awabakal and Guringai are the traditional descendants of this area, and also have the rights and obligation according to our Lore and Custom, to return these significant objects onto country.

With regards to the reporting requirements outlined on pages 36-37, if a breach of the mentioned management policy is referred to, then why would there not be a Management Plan put in place if the document is actually refereeing to management procedures and management policy. Therefore we highly recommend that a Plan of Management would be the proffered option to cover these aspects, and should be included within the Project Approval by the Department of Planning.

With regards to the comment within section 10.3 on page 37, we question the difference regarding the note which mentions that; *"the word impact in this section is defined as an impact on the significance of Aboriginal cultural heritage rather than simply an increased physical impact"*, because as we see it, an 'impact is an impact', whether it is referring to the significance and/or a physical impact on our Cultural Heritage, there is No difference. Therefore we believe that this section will need further clarification.

With regards to section 10.3.1 on pages 37-39, we do not agree and/or support the reference to changes that pertain to Cultural Heritage within this section, and believe that any changes that involves impact on Aboriginal Cultural Heritage needs to be discussed with the appropriate RAP's as part of the consultation process, even if the archaeologists considers that; *"If a proposed change to the Approved Project is considered to have a neutral or lesser significant impact on Aboriginal cultural heritage"*, we would like to reiterate here that an 'impact is an impact', there is No difference.

With regards to section 10.4 on page 39, our Elders would like to reiterate that a Plan of Management is very much needed in consultation with the appropriate RAP's, to resolve the issues outlined and raised within sections 10 - 10.4. We are concerned that aspects discussed within the document pertaining to the management of our Aboriginal Cultural Heritage significance and Values, is seen by our Elders as culturally inappropriate.

The future management of our Cultural Heritage is of the up-most importance to our peoples, and accordingly the remnants of our Ancestors have both a physical and spiritual

5

connection and a primary association with our cultural boundary. Therefore, any artefact/object and the residual evidence of our peoples are held in high regard and are considered a cultural reminder that unites us with our land and sea country, our past and spirituality and provides us with a visual generational legacy. Therefore the appropriate management of our Cultural Heritage is of great significance.

We are also concerned that the Draft Aboriginal Cultural Heritage Assessment Report does not contain any reference and/or management recommendations for the collection of the artefacts recorded on the initial walkover. Therefore this aspect needs to be clarified within the Draft document.

We also have concerns that the Draft Report has not taken into consideration the impact on unknown sites due to the observation and information gathering process, and/or consideration regarding the extent of the proposed works will have on the Cultural Heritage and Values of the area, which again have not been taken into account. It has been our experience that extensive impacts pertaining to the actual extent of the maximum impact area, including machinery impact earthworks being proposed, are continually being underestimated.

At this juncture the proposed Draft Aboriginal Cultural Heritage Assessment Report Regarding the Rankin Park to Jesmond Newcastle Inner City Bypass Project clearly shows that the Draft document needs further editing, clarification and information before a finalized Draft document will be accepted, as we consider that the proposed Draft Aboriginal Cultural Heritage Assessment Report is insufficient in its current form.

Because of the factors detailed in our Review and Response, we believe we have no other cause of action than to in the strongest forms possible that the Draft document should not be accepted as providing enough evidence to inform the implementation of the Management Procedures, and should not be accepted as compliant with the Department of Planning Requirements to adequately and to confidently undertake and inform an approvals or non - approvals outcome.

The continued destruction of our Cultural Heritage and Values and given the high levels of distress and concern that the consultation process is causing our peoples, and the long term intergenerational adverse impacts on our families and our culture, we hope that our comments are given due consideration.

We, as the Descendants of the Awabakal and Guringai People believe that it is important to protect the Cultural Heritage of our Ancestors. Life here prior to colonisation had an abundant existence, and resources such as seafood, wildlife and plants abounded.

The use of stone tools is undeniably associated with a certain relationship with the natural environment. The high level of history already documented from the region is an indication that this area was utilised by the Awabakal and Guringai Peoples prior to European settlement.

6

Since the earliest days of colonial impact, our history has been a well-documented one, with the most reliable information relayed by our peoples first hand, and also supplemented by non-Indigenous observation and interpretation. This cultural environment is a holistic one that interconnects our spirituality and land to our peoples past, present and future. Today, the descendants of the Awabakal and Guringai People believe now more than ever, that it is essential to nurture new visions that are inspired by the cultural integrity of their ancestral family.

Though our Peoples experience since colonisation has been marred with violence, disrespect and complexity, the acknowledgment of the Awabakal and Guringai cultural base is still critical in understanding the purpose of the region's future. The principles of the Awabakal Tradition and Culture still exists today to keep intact the moral and spiritual fibre of this land, giving direction to all who live in the land of our Peoples.

Aboriginal people are connected through their own unique cultural tapestry that is complex, which entwines the people with the land, language, totems and kinship relationships to their sacred dreaming, culture and heritage.

Our ancestors taught us to love and take care of our own country, and not to desire the lands that belong to the people of other nations. This region is full of meaningful cultural reminders that speak to the present day through the Awabakal and Guringai Creation Stories, Language and Art. The principles of traditional culture are there to keep intact the moral and spiritual fibre of Aboriginal People to survive in the land of their Ancestors.

All land is culturally significant to Aboriginal people and therefore deserves the respect and sensitivity that connects us to our ancestral lands.

We would like to thank Kelleher Nightingale Consulting for the opportunity to comment and request a copy of the Final Draft Report demonstrating how you have addressed all the Aboriginal Stakeholder comments be forwarded to the Awabakal and Guringai Pty Ltd at your earliest convenience.

If you require any further information please do not hesitate in contacting me.

Kind regards,
Kerrie Brauer
Director | Administration

Awabakal & Guringai Pty Ltd
ABN: 81 609 498 491 | ACN 609 498 491
PO Box 122 Rutherford NSW 2320 Australia
M : 0412 866 357 | E: kerrie@awabakal.com.au

7

Ben Anderson

From: Lower Hunter Aboriginal Incorporated <lowerhunterai@gmail.com>
Sent: Thursday, 26 October 2017 11:39 AM
To: SWAN Deborah
Subject: Re: RP2J - PACHCI 3 - Comments on the draft CHAR

Hi Deb

On behalf of LHAI we have received the draft CHAR. LHAI approves the report and has no further comments to add.

Thank You David Ahoy
Sites Manager
LHAI
Mobile 0421329520

Lower Hunter Aboriginal Incorporated
5 Killara Drive
Cardiff South NSW 2285
ABN: 8192 4628 138
Email: *lowerhunterai@gmail.com*

1

Madeline Harding

From: tn.miller@southernphone.com.au
Sent: Friday, 29 September 2017 5:44 PM
To: Madeline Harding
Cc: Nicole Davis
Subject: Re: Draft CHAR Review - Proposed Newcastle Inner City Bypass, Rankin Park to Jesmond, NSW Wonnarua

Follow Up Flag: Follow up
Flag Status: Flagged

Madeline this is an area were a lot of ABORIGINAL PEOPLE LIVED FROM BEFORE AND AFTER EUROPEANS INVADED OUR LAND.
Just because archaeologists define sites to be of low significance does not mean that the ABORIGINAL COMMUNITY DOES. We believe all sites are significant. When you say three sites (RP2J AFT 4, RP 2JIF 1 and RP2J IF 2 all display high disturbance levels and limited archaeological information. We say that all of NSW has been disturbed but this does not take away the integrity of a site and all areas should be salvaged. The whole of this project should be investigated throughout its entire. When you say that places will not be impacted on the whole of this project will be impacted in some way and it needs to be investigated in true and just way.

Regards
Tom Miller
WONNARUA ELDER LHWCS

Murra Bidgee Mullangari

Aboriginal Corporation Cultural Heritage
ICN: 8112

Date: 27/9/2017

Attention: Matthew Kelleher

Kelleher Nightingale Consulting Pty Ltd
Level 10, 25 Bligh Street,
Sydney NSW 2000

Dear Matthew,

Re: Draft CHAR review - Proposed Newcastle Inner City Bypass, Rankin Park to Jesmond, NSW

I have read the draft char review for the above project and do not endorse the recommendations made by Kelleher Nightingale Consulting.

I have requested further information from you which you have not given to me. I am very concerned as to the fact of the test excavation that was done by your company for the above project, I would like to request that your company confirm to me the RAP employees that were involved and engaged by your company and the RMS to do the test excavation.

I would like to feel confident that these RAPS that were engaged by the RMS and Kelleher Nightingale hold the cultural knowledge that is required. I need to be reassured that these RAPS that were engaged by yourself and the RMS have the experience to determine the significance of Aboriginal object(s) and/or place(s) in the proposed area of the project and if you are certain that these RAPS hold the cultural knowledge and can determine the significance of Aboriginal object(s) and/or place(s), there should not be a problem with my request for further information, I have become concerned when your company would not give me this information.

If you require further details please feel free to contact me either by mobile or email. I look forward to hearing from you.

Kind regards

Darleen Carroll – Johnson | **Administration –Site Officer**
M: 0490 051 102

Ryan Carroll - Johnson | **Site Officer**
M: 0467 255 733

Murra Bidgee Mullangari
Aboriginal Corporation Cultural Heritage
A: PO Box 246, Seven Hills, NSW, 2147
E: murrabidgeemullangari@yahoo.com.au

Appendix D Salvage Excavation Methodology

Methodology

Research Aims
The main aims of the proposed salvage excavation program are:

- To salvage a representative sample of the identified archaeological site RP2J AFT 3 prior to construction impact.
- To analyse the salvaged archaeological material to gain and conserve knowledge and understanding of the scientific and cultural information exhibited by the activities associated with landforms adjacent to a creek junction.
- Analysis of the geomorphological history of the project area, specifically examining the impacts of erosional forces on the archaeological record (taphonomy and chronology).

The further scientific aim of the salvage excavation program would be to determine the subsurface integrity, extent, spatial distribution and nature of the cultural deposit and the specific types of associated archaeological/cultural activities.

- Determining the integrity of the deposit involves assessing the degree of disturbance which is present.
- Determining the statistical extent of the sites and/or activity areas involves identifying the boundaries associated with the identified archaeological deposit.
- Assessing the spatial distribution involves identifying the presence/absence of archaeological material across the identified archaeological sites.
- The nature of the sites refers to the type of activities indicated by the artefactual material (e.g. primary production, tool maintenance, domestic knapping, hunting camps). The goal would be to retrieve entire assemblages from specific activities if such activities were present.
- Retrieved assemblages would be compared with the results from other relevant archaeological projects in order to assess significance.

Research Question

The results of the proposed salvage excavation would increase our understanding of subsurface archaeology of the project area. In particular, research would focus on the archaeologically-identifiable cultural activities that took place on elevated landforms adjacent to a creek junction addressing questions about past activity events and survivability of the deposit.

> **Question 1**: What cultural activities are archaeologically identifiable at site RP2J AFT 3 and how do these potentially differ from archaeological sites on other landforms in the Newcastle urban area or region?
>
> **Question 2**: What are the taphonomic features of archaeological site RP2J AFT 3? What does this indicate about site integrity and artefact survivability for sites on similar landforms especially within urban environments?

What can we expect?

It is anticipated that differences in stone tool assemblages may be related to different cultural activities (e.g. primary reduction vs maintenance flaking). The science of archaeology is paramount to any research question and it is important to stress that the goal for the salvage program for all excavated sites is straight forward: to retrieve a viable sample for comparative analysis using established techniques (see Field Methods below). In this regard interpretation would not precede data collection. The proposed archaeological program would systematically sample the relevant areas using standard techniques with the outcome being a viable, robust and comparable sample. Analysis of the sample would follow and interpretations would be made distinctly separate from the results.

Archaeological Salvage Areas

Salvage excavation would be undertaken on identified archaeological site RP2J AFT 3. Salvage excavation of the site would focus on the extraction of collections of artefacts related to activity areas and geomorphic information.

FIELD METHODS

The goal of the field excavation program is to recover significant assemblages of artefacts.

Salvage Program

In order to achieve the most robust and comparable result, KNC advocates an open area salvage excavation. The first phase in open area salvage is to establish the statistical boundaries of the previously identified archaeological deposit. In other words, recording the spread of activities across the site/landscape. This approach is designed to salvage the spatial properties of the site as shown in the lithic continuum.

Phase 1

A series of 1 m^2 squares are excavated on a transect grid at about 15 metre intervals overlain on each site to mark the spread of lithics and related geomorphic activity (Figure 19). This will build on previous test excavation results.

GDA 94 coordinates would be recorded for each square to enable three dimensional modelling. Statistical salvage following this method is highly beneficial because it creates a robust inter-site sample, sufficiently random, critical for regional comparative analysis. No other method is as efficient or effective. It is anticipated that a maximum of 25m^2 would be excavated within site RP2J AFT 3 during Phase 1.

Individual excavation squares measuring 1 m^2 would be hand excavated in stratigraphic units (Unit A, Unit B, etc.). Squares would be excavated until the basal layer or culturally sterile deposit is reached (usually 25-35 cm). Test excavation of the area indicates no archaeological stratigraphy within units. As such the A1 and A2 soil layers are culturally one layer (suffering from cyclical soil transfer resulting in a mixed cultural profile within the soil) and can be salvaged as one unit where possible. All excavated deposit would be sieved using nested 5.0 mm and 2.5 mm sieves. Where potential micro-debitage is recovered 1.0mm sieves will be utilised.

The location of each excavated square would be identified on a surveyed plan of the site. Stratigraphic sections detailing the stratigraphy and features within the excavated deposit would be drawn and all squares would be photographed. Soil samples as well as thin section profiles (where feasible) would also be collected. The stratigraphy of all excavated areas would be fully documented and appropriate records archived.

Phase 2

Open area salvage of significant deposit follows the Phase 1 assessment. Additional 1 m^2 squares, constituting an open area, will be excavated around information bearing deposits along the excavation grid. Information bearing deposits are identified by triggers such as: significant quantities of artefacts, variations in raw material, unusual artefacts, chronological material and/or taphonomic indicators. In this context chronologic material is anything that can be used to date artefacts or deposit: charcoal or charcoal bearing deposit (e.g. hearth ash), sandy deposit, gravels (e.g. aluminium feldspar). Phase 2 open area investigation would expand to encompass entire activity areas. The location of Phase 2 open area investigation would be based on Phase 1 results.

It is anticipated that up to 50m^2 of Phase 2 open area salvage may be excavated within the site if Phase 1 results warrant this approach. Total salvage area would be a maximum of 75m^2 for the site (combining both Phase 1 and Phase 2).

Where possible, carbon samples will be collected and analysed for material relating to both the archaeology and geomorphology. Where appropriate cosmogenic and radiometric dating of soils and rock surfaces will be applied (Nishiizumi et al. 1986, 1993).

Figure 19. Indicative excavation area transects for Phase 1

Surface Collection

Surface collection by hand will be undertaken at sites: RP2J AFT 3, RP2J AFT 4, RP2J IF 1 and RP2J IF 2. The collected objects will be recorded as part of the excavation report and included in the excavation assemblage for long term storage.

Analysis

Artefacts would be analysed on a comparable level with previous analyses of excavated assemblages. Information derived from this analysis; in particular the identification of specific artefact types and their distributions and associations; would be used to put together interpretations about how sites were used, where sites were located across the landscape, the age of sites and to assess cultural heritage values. By comparing different areas it would be possible to determine whether there were differences in the kinds of activities carried out and if different activities were related to different landforms.

A range of stone artefacts may be present across the salvage areas and the analysis would expand accordingly to account for artefact variability. All information would be recorded in database form (MS Excel). Various types of evidence would be used to determine the kinds of activities that were carried out. A short description of the proposed analysis in outlined below.

- Field analysis would record basic data, such as material type, number and any significant technological characteristics, such as backing or bipolar techniques; added to this would be any provenance data such as pit ID and spit number. The purpose of the field recording is twofold: 1) establish a basic recording of artefacts retrieved and 2) to allow on-going assessment of the excavation regime (e.g. whether higher stratigraphic resolution is required while digging).
- Detailed (laboratory) analysis would entail recording a larger number of characteristics for each individual artefact. These details would be recorded in matrices suitable for comparative analysis (e.g. multivariate and univariate) of the excavated assemblage on a local and regional basis.
- Lithic characteristics to be recorded cover a range of basic information but are not limited to these categories (see example below). For transparency, terms and category types would in large part be derived from Holdaway and Stern (2004).

Sample Categories		
Record Number	% Cortex	Flake Type
Square ID	Length	Termination Type
Spit Number	Width	Core Type
Count	Thickness	Number of Scars (Core)
Raw Material	Weight	Scar Type (Core)
Colour	Modification	Shape of Flake
Quality	Reduction Type	Platform Type

- A detailed explanation and glossary would be provided with the final excavation report.
- Minimum Number of Flake (MNF) calculations formulated by Hiscock (2000, 2002) would be undertaken where applicable (although past experience indicates MNF calculations would not be required for this excavation program).

The analysis of artefacts recovered during the excavation program would be undertaken in a transparent and replicable fashion so as to permit the comparison of the entire excavated assemblage with data from other areas. This would also allow for an interpretation of the project area's archaeological significance.